CENTRAL
STATE UNIVERSITY

Academic Catalog
2025-2026

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TBA	Residence Halls Open for NEW and Transfer Students only
TBA	Pirate Week
TBA	Residence Halls Open for Returning Students
August 21 (Th)	University Institute
August 22 (F)	Research Institute
August 25 (M)	Classes Begin (Full Term= 16 weeks) (Fall A=8 Weeks)
August 25 (M)	Last Day for 100% Refund (TOTAL WITHDRAWAL)
August 25-29 (M-F)	Welcome Week
August 25-29 (M-F)	Drop/Add Period for Full Term
September 1 (M)	Labor Day Holiday: University Closed
September 2 (Tu)	Attendance Reporting (6th class day) by Faculty due by noon
Aug 26-Sept 3 (Tu-W)	90% Refund Period (TOTAL WITHDRAWAL)
September 7 (Su)	Last day to drop without record (does not apply to Total Withdrawal)
September 8 (M)	Attendance Reporting (10th class day) by Faculty due by noon
September 8 (M)	Enrollment Census Date (Official Statistics Date)
September 14 (Su)	50% Refund Period (TOTAL WITHDRAWAL)
September 26 (F)	Last Day to Make Up "I" Grades from Spring and Summer 2025
September 29 (M)	Last Day for Instructors to turn in "I" Grade Changes – Due by noon
October 2 (Th)	25% Refund Period for (TOTAL WITHDRAWAL)
October 3 (F)	First Interim Grade Reporting Period- Due by noon
October 10-13 (F-M)	Fall Homecoming Break (No Classes, University Open)
October 11 (Sa)	0% Refund for TOTAL WITHDRAWAL from the University
October 16-17 (TH-F)	Final Exams (Fall Term A)
October 17 (F)	Last Day of Classes for Fall Term A
October 20 (M)	Classes begin for Fall Term B
October 21 (Tu)	Registration begins for the Spring Semester 2026
October 22 (W)	Fall Term A grades due by noon
November 7 (F)	Mid-Term Grade Reporting Due (Second Interim) - Due by noon
November 11 (Tu)	Veteran's Day Observed: University Closed
November 14 (F)	Last day to Withdraw a "W" Grade
November 14 (F)	Last Day to Register for Spring 2026 without $100 Late Registration Fee
November 14 (F)	Deadline to submit Fall 2025 Graduation Application ($50.00 fee)
November 17 (M)	Spring 2026 Late fee - $100 for Continuing Students
November 26-28 (W-F)	Thanksgiving Holiday: University Closed
December 1 (M)	Classes Resume after Thanksgiving Holiday Break
December 15 (M)	Last day of Classes (Full Term)
December 16-19	Final Exams
December 19 (F)	Last Day of Classes (Term B)
December 23 (Tu)	Final grades due by noon

FALL SEMESTER 2025
TERM A
August 25 - October 17, 2025

August 25 (M)	Classes begin for Fall A Term
August 25 (M)	Last Day for 100% Refund (TOTAL WITHDRAWAL)
August 25-27 (M-W)	Drop/Add Period
August 26-27 (Tu-W)	90% Refund Period (TOTAL WITHDRAWA)
August 29 (F)	Last day to Drop a class without Record (Does not apply to Total Withdrawal)
September 1 (M)	Labor Day Holiday: University Closed
September 2 (Tu)	Attendance Reporting (6th class day) by Faculty due by noon
September 2-5 (Tu-F)	50% Refund Period (TOTAL WITHDRAWAL)
September 8 (M)	Attendance Reporting (10th class day) by Faculty due by noon
September 6-12 (Sa-F)	25% Refund Period (TOTAL WITHDRAWAL)
September 13 (Sa)	0% Refund Period
September 13 (Sa)	Last day to Drop or Withdraw from a class with a “W” Grade
October 16-17 (Th-F)	Final Exams for Fall Term A
October 17 (F)	Last Day of Classes for Fall Term A
October 21 (Tu)	Final Grades for the Fall Term A-Due by noon

FALL SEMESTER 2025
TERM B
October 20 - December 19, 2025

October 20 (M)	Classes begin for Fall Term B
October 20 (M)	Last Day for 100% Refund (TOTAL WITIHDRAWAL)
October 20-22 (M-W)	Drop/Add Period
October 23-24 (Th-F)	90% Refund Period (TOTAL WITHDRAWAL)
October 24 (F)	Last Day to Drop a class without record
October 27 (M)	Attendance Reporting (6th Class Day) - Noon Deadline
October 27-31 (M-F)	50% Refund Period (TOTAL WITHDRAWL)
October 31 (F)	Attendance Reporting (10th Class Day) - Noon Deadline
November 3-7 (M-F)	25% Refund Period (TOTAL WITHDRAWAL)
November 8 (Sa)	0% Refund Begins (TOTAL WITHDRAWAL
November 8 (Sa)	Last Day to Withdraw with a "W" Grade
November 11 (Tu)	Veteran's Day Observed - University Closed
November 26-28 (W-F)	Thanksgiving Holiday - University Closed
December 1 (M)	Classes Resume
December 18-19 (TH-F)	Final Exams for Fall Term B
December 19 (F)	Last Day of Classes for Fall Term B
December 23 (TU)	Finals Grades for Fall Term B Due - Noon Deadline

CENTRAL STATE UNIVERSITY
Spring Semester 2026

TBA	Residence Halls Open for New, Transfer, Continuing Students
January 20, 2026 (Tu)	Classes Begin (Full term = 16 weeks) (Spring A = 8 weeks)
January 20, 2026 (Tu)	Last Day for a 100% Refund (Total Withdrawal)
January 20-23, 2026	Welcome Week
January 20-23, 2026	Drop/Add Period
January 27, 2026 (Tu)	Attendance Reporting (6th Class day) by Faculty due by noon
January 29, 2026 (Th)	90% Refund for TOTAL WITHDRAWAL from the University
February 2, 2026 (M)	Attendance Reporting (10th Class day) by Faculty due by noon
February 2, 2026 (M)	Last Day to Drop a Class without Record (Does not apply to Total Withdrawal)
February 3, 2026 (Tu)	Enrollment Census Date (Official Statistics Date)
February 10, 2026 (Tu)	Last day for 50% Refund for TOTAL WITHDRAWAL from the University
February 16, 2026 (M)	Presidents' Day (No Classes, University Closed)
February 27, 2026 (F)	First Interim Grade Reporting Period due by noon
February 27, 2026 (F)	Last Day to Make Up "I" Grades from Fall Semester 2025
February 27, 2026 (F)	Last day for 25% Refund for TOTAL WITHDRAWAL from the University
February 28, 2026 (Sa)	0% Refund for TOTAL WITHDRAWAL from the University
March 2, 2026 (M)	Last Day for Instructors to turn in "I" Grade Changes
March 3, 2026 (Tu)	139th Charter Day
March 6, 2026 (F)	Final deadline for submitting spring graduation applications and $50.00 fee.
March 13, 2026 (F)	Senior Salute
March 13, 2026 (F)	Last Day of Classes for Spring A
March 16-20, 2026	Spring Break (No Classes, University Open)
March 23, 2026 (M)	Spring A final grades due
March 23, 2026 (M)	Spring Term B begins (8 weeks)
March 23, 2026 (M)	Registration begins for 2026 Summer and Fall Semesters
April 7, 2026 (Tu)	Academic Recognition Convocation
April 10, 2026 (F)	Mid-Term Grade Reporting Period Second Interim
April 10, 2026 (F)	Last Day to Register for fall and summer without $300 Late Registration Fee
April 17, 2026 (F)	Last day to Drop or Withdraw from a class with a "W" Grade. Last day to do total withdrawal.
May 8, 2026 (F)	Last Day of Classes (Full Term)
May 11-14, 2026	Final Exams
May 15, 2026 (F)	Last Day of Classes (Term B)
May 15, 2026 (F)	Rehearsal for Commencement
May 15, 2026 (F)	Graduating Seniors Baccalaureate
May 15, 2026 (F)	Summer and Fall 2026 Late Fee- $100 for continuing students
May 16, 2026 (Sa)	Commencement (Saturday)
TBD	Residence Halls Close
May 19, 2026 (Tu)	Final Grades Due by Noon (Full Term and Spring B); Faculty Retreat

Spring Semester 2026
Term A

January 20, 2026 (Tu)	Classes begin for Spring A term
January 20, 2026 (Tu)	Last Day for 100% Refund (TOTAL WITHDRAWAL)
January 20-21, 2026	Drop/Add Period
January 22-23, 2026	90% Refund for TOTAL WITHDRAWAL from the University
January 23, 2026 (F)	Last day to Drop a class without Record (Does not apply to Total Withdrawal)
January 24-30, 2026	50% Refund for TOTAL WITHDRAWAL from the University
January 27, 2026 (Tu)	Attendance Reporting (6th class day) by Faculty due by noon
February 2, 2026 (M)	Attendance Reporting (10th class day) by Faculty due by noon
January 31-February 6, 2026	25% Refund for TOTAL WITHDRAWAL from the University
February 7, 2026 (Sa)	0% Refund for TOTAL WITHDRAWAL from the University
February 7, 2026 (Sa)	Last day to Drop or Withdraw from a class with a "W" Grade
February 16, 2026 (M)	Presidents' Day (No Classes, University Closed)
March 3, 2026 (Tu)	Charter Day
March 12-13, 2026	Final Exams for Spring Term A
March 13, 2026 (F)	Last Day of Classes for Spring Term A
March 16-20, 2026	Spring Break (No classes, University Open)
March 23, 2026 (M)	Final Grades for Spring Term A -Due by noon

Spring Semester 2026
Term B

March 23, 2026 (M)	First Day of Classes Spring B
March 23, 2026 (M)	Last Day for 100% Refund (TOTAL WITHDRAWAL)
March 23-25, 2026	Drop/Add Period
March 26-27, 2026	90% Refund for TOTAL WITHDRAWAL from the University
March 28-April 3, 2026	50% Refund for TOTAL WITHDRAWAL from the University
March 30, 2026 (M)	Attendance Reporting (6th class day) by Faculty due by noon
April 3, 2026 (F)	Attendance Reporting (10th class day) by Faculty due by noon
April 4-10, 2026	25% Refund for TOTAL WITHDRAWAL from the University
April 11, 2026 (Sa)	0% Refund for TOTAL WITHDRAWAL from the University
April 11, 2026 (Sa)	Last day to Drop or Withdraw from a class with a "W" Grade
May 8, 2026 (F)	Last Day of Classes (Ful Term)
May 11-14, 2026	Final Exams
May 15, 2026 (F)	Last Day of Classes (Spring B)
May 15, 2026 (F)	Summer and Fall 2026 Late registration begin - $100 Late fee
May 19, 2026 (Tu)	Final Grades due at noon (Full Term and Spring B)

Summer 2026 Event	Summer I (10 week)	Summer II (5 week)	Summer III (5 week)	Summer IV (online only)
Late Registration for Continuing Students ($300 Fee Assessed)	March 20, 2026 (F)	March 20, 2026 (F)	March 20, 2026 (F)	March 20, 2026 (F)
Residence Halls Open	May 17, 2026 (Su)	May 17, 2026 (Su)	June 21, 2026 (Su)	
(Full Term) Classes Begin	May 18, 2026 (M)	May 18, 2026 (M)	June 22, 2026 (M)	May 18, 2026 (M)
Last Day for 100% Refund (Total Withdrawal)	May 18, 2026 (M)	May 18, 2026 (M)	June 22, 2026 (M)	May 18, 2026 (M)
Drop/Add Period	May 18-24, 2026	May 18-24, 2026	June 22-26, 2026	May 18-24, 2026
90% Refund for TOTAL WITHDRAWAL from the University	May 19-24, 2026	May 19-24, 2026	June 23-28, 2026	May 19-24, 2026
Last Day for New Students to Enroll	May 22, 2026 (F)	May 22, 2026 (F)	June 26, 2026 (F)	May 22, 2026 (F)
50% Refund for TOTAL WITHDRAWAL from the University	May 25-29, 2026	May 25-29, 2026	June 29- July 5, 2026	May 25-29, 2026
Attendance Reporting by Faculty due by noon (4th class day)	May 21, 2026 (Th)	May 21, 2026 (Th)	June 25, 2026 (Th)	May 21, 2026 (Th)
25% Refund for TOTAL WITHDRAWAL from the University	May 30—June 5, 2026	May 30—June 5, 2026	July 6-12, 2026	May 30—June 5, 2026
Enrollment Census Date - Official Statistics Date (10th class day)	June 1, 2026 (M)	June 1, 2026 (M)	July 6, 2026 (M)	June 1, 2026 (M)
0% Refund for TOTAL WITHDRAWAL from the University	June 12, 2026 (F)	June 5, 2026 (F)	July 10, 2026 (F)	June 12, 2026 (F)
Last Day to Withdraw from a Class with a "W" grade	June 19, 2026 (F)	June 5, 2026 (F)	July 10, 2026 (F)	June 19, 2026 (F)
Final Examinations for the Main and CSU Dayton Campuses	July 24, 2026 (F)	June 19, 2026 (F)	July 24, 2026 (F)	July 10, 2026 (F)
Last Day of Classes	July 24, 2026 (F)	June 19, 2026 (F)	July 24, 2026 (F)	July 10, 2026 (F)
Residence Halls Close	July 24, 2026 (F)	June 19, 2026 (F)	July 24, 2026 (F)	July 10, 2026 (F)
Final Grades Due by Noon	August 5, 2026 (W)	July 1, 2026 (W)	August 5, 2026 (W)	July 17, 2026 (F)
Degree Conferral Date	August 7, 2026 (F)	August 7, 2026 (F)	August 7, 2026 (F)	August 7, 2026 (F)

Memorial Day (No Classes, Offices Closed) ***Monday May 25, 2026***
Juneteenth (No Classes, Offices Closed) ***Friday, June 19, 2026***
Independence Day (No Classes, Offices Closed) ***Friday July 3, 2026***

Summer Session I - 10 Weeks (M) May 18- (F) July 24, 2026
Summer Session II – 5 Weeks (M) May 18 – (F) June 19, 2026
Summer Session III - 5 Weeks (M) June 22 – (F) July 24, 2026
Summer Session IV - 8 Weeks (M) May 18 – (F) July 10, 2026 (online only)

CENTRAL STATE UNIVERSITY

VISION

Central State University is the premier Land-Grant Institution of excellence in teaching, learning, and research that embraces diversity and innovation in a global society.

MISSION

Central State University a proud HBCU, fosters academic excellence within a nurturing living-learning environment and graduates a diverse population prepared for leadership, research, and service in Ohio and beyond.

PURPOSE

The purpose of Central State University is to provide opportunities in higher education for the citizens of Ohio and other qualified applicants, including both national and international students.

Central State University is dedicated to:

- providing a nurturing and culturally enriched learning environment.
- stimulating in students an intellectual curiosity and a continuous search for knowledge.
- teaching students to think critically and communicate effectively.
- instilling in students an aspiration for excellence through teaching, service, and scholarly research.
- preparing students to address the challenges of a technologically oriented world.
- providing quality educational programs in scientific and technological fields.
- offering programs with multicultural and global perspectives.
- reaching out to underserved populations; and
- collaborating with other educational institutions, business organizations and government agencies to enrich learning experiences and educational opportunities for students.

HISTORY

Central State University's history begins with our parent institution Wilberforce University, named in honor of the great abolitionist William Wilberforce. Established at Tawawa Springs, Ohio, in 1856, it is affiliated with the African Methodist Episcopal (A.M.E.) Church and is one of the oldest Black-administered institutions of higher education in the nation.

In 1887, the Ohio General Assembly enacted legislation that created a Combined Normal and Industrial Department at Wilberforce University. The objectives of this new state-sponsored department were to provide teacher training and vocational education, and to stabilize these programs by assuring a financial base similar to that of other state-supported institutions.

The statute establishing the Combined Normal and Industrial Department declared that the institution was 'open to all applicants of good and moral character, thereby indicating no limitations as to race, color, sex, or creed. It was clear, however, that the Department and its successors were designed to serve the educational needs of African American students.

Although this Department operated as part of Wilberforce University in most respects, a separate board of trustees was appointed to govern the state-financed operations. In 1941, the Department expanded from a two- to a four-year program, and in 1947, it legally split from Wilberforce, becoming the College of Education and Industrial Arts at Wilberforce. The name was changed in 1951 to Central State College, and in 1965, the institution achieved university status. The University has grown steadily since its founding. In recent years, it has added new academic programs,

established a new College of Engineering, Science, Technology, and Agriculture, and constructed a new Student Center, an academic building, and four new residence halls. In 2023, the Honor's residence hall was completed.

The University has grown steadily since its founding. There are three Colleges: Engineering, Science, Technology, and Agriculture; Business; and Humanities, Arts, Social Sciences, and Education. Additionally, new academic programs have been added along with a School of Agricultural Education and Food Science, an 85,000 sq. ft., University Student Center, and five residence halls. The most recent residence hall opened in fall 2019 and is the University's first 250-bed apartment-style facility. In summer 2020, the University celebrated the grand opening of the Botanical Garden, which will serve the campus and local communities by providing a space to engage in and observe the benefits of meditation and agricultural best practices.

Morakinyo A.O. Kuti, Ph.D., became the 10th President of Central State University on July 1, 2024. A 1985 graduate of Central State University, he brings a wealth of experience and a clear vision for the university's future. Most recently serving as the vice president of Research and Economic Development and director of 1890 Land-Grant programs, Dr. Kuti has already made significant strides in fostering change and addressing societal needs through research initiatives.

As part of its journey to become a destination learning environment, Central State University will focus on four key strategies, based on feedback from Presidential listening sessions and the Cultural Contextual Elements (CCE) survey:

- Building Bridges Across Stakeholders: Strengthening communication and collaboration among students, faculty, staff, alumni, and community partners to foster a unified community.
- Empowering Faculty and Staff: Providing the tools, training, and support for faculty and staff to thrive and contribute to the university's success.
- Prioritizing Student Success: Placing students' academic achievement, personal growth, and well-being at the forefront of all decisions and resources to ensure holistic success during and beyond their time at Central State.
- Optimizing Campus Resources: Efficiently managing university assets, facilities, and personnel to enhance educational outcomes and operational effectiveness.

These strategies reflect our commitment to making Central State University a premier learning destination, with regular progress updates shared at Board of Trustees meetings and throughout the campus community. The university will publish the 2025-2030 Strategic Plan with goals and strategies that build on these key presidential priorities.

Central State University is expanding science, technology, engineering, agricultural, and mathematics, academic programming, research, and education; developing partnerships within Ohio's agricultural industry; enhancing facilities; and engaging the local communities, all for the future growth and sustainability of the University.

Central State University embraces change: but one thing that has not changed is its continuing commitment to providing an excellent, affordable education to residents of Ohio and beyond. Our future is *bright*!

LOCATIONS

Central State University's main campus is located in Wilberforce, Ohio, four miles northeast of Xenia and 18 miles east of Dayton. The main campus is midway between Cincinnati and Columbus on U.S. 42, about 55 miles from each city. Airline, bus, and taxi services are available in Dayton.

Central State University – Dayton, the university's satellite location, is at 840 Germantown Street, Dayton, Ohio.

THE CAMPUS

Central State University has facilities valued at more than $95 million dollars, including: the Joshua I. Smith Center for Education and Natural Sciences; University Student Center; the Mass Communications Center; the McLin Center for Water Resources Management; the Paul Robeson Cultural and Performing Arts Center; the Hallie Q. Brown Memorial Library; the Newsom Administration Building; the Ward University Center; the Galloway Tower; the Walter G. Sellers Alumni Center; and the Louis Stokes Center on Aging,

Athletic facilities include the Walker Gymnasium, the Beacom-Lewis Gymnasium for intercollegiate basketball, tennis and racquetball courts, and McPherson Stadium for football and special events, and practice fields.

The campus terrain is rolling and planted in lawns accented by flowering shrubs, trees, and flower beds, and centered by the attractive Sunken Gardens. Spacious paved walkways make foot travel across the campus easy and convenient.

Across Brush Row Road and along U.S. 42 is the University's outdoor education area, a natural reserve, and within a hundred yards of the Robeson Center is the National Afro-American Museum and Cultural Center, an outstanding facility that chronicles African American history and sponsors a variety of programs.

Central State University – Dayton offers an array of evening and weekends classes for students seeking to receive a degree or obtain professional development.

STUDENTS AND FACULTY

Central State University's enrollment was 2,719 students in the Fall of 2024.

Central State University employs more than 200 full-time and adjunct faculty. In addition to their teaching and research, faculty members at Central State have a deep commitment to helping students outside the classroom, especially in academic advising and mentoring throughout the year. The faculty serve as academic advisors to students in their respective academic disciplines.

ACCREDITATIONS

Central State University, Ohio's 1890 Land-Grant University, is regionally accredited by the Higher Learning Commission, which is located at 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1411. Tel. (800) 621-7440.

Following a comprehensive review of CSU's academic programs and services on March 13-14, 2023, the Higher Learning Commission continued CSU'S accreditation for the next ten years.

Accredited Degree Programs

College of Business

Central State University's College of Business received a 10-year accreditation from the Accreditation Council for Business Schools and Programs (ACBSP). Established in 1988, ACBSP is the only organization offering specialized business accreditation for all degree levels, from associate to baccalaureate to doctoral degree programs. The accreditation covers all degrees offered in the College of Business.

College of Humanities, Arts, Social Sciences, and Education

Department of Professional Education and Music

The Department of Professional Education and Music offers education degree programs authorized by the State of Ohio. The programs are accredited by the Council for Accreditation of Education Preparation (CAEP). The music program offers a Bachelor of Music degree with concentrations in Jazz Studies, Music Education, and Performance and is accredited by the National Association of Schools of Music.

Department of Health and Social Sciences

The social work program, housed within the Department of Health and Social Sciences is accredited by the Council on Social Work Education (CSWE). CSWE is recognized by the Council for Higher Education Accreditation as the sole accrediting agency for social work education in this country. The social work program offers the Bachelor of Arts and the Bachelor of Science in Social Work.

Department of Communications and Visual Arts

Central State University is accredited by the National Association of Schools of Art and Design and offers the Bachelor of Arts in Art with concentrations in Studio Art and Graphic Design and the Bachelor of Science in Art Education.

John W. Garland College of Engineering, Science, Technology, and Agriculture

The John W. Garland College of Engineering, Science, Technology, and Agriculture houses two ABET-EAC accredited programs, Manufacturing Engineering and Environmental Engineering. ABET is a nonprofit, non-governmental organization recognized by the Council for Higher Education Accreditation (CHEA).

CSU Online Programs

Central State University online programs are certified by the United States Distance Learning Association (USDLA).

It is regulated by the National Council for State Authorization and Reciprocity Agreements (NCSARA) and is accredited by the National Accreditation and Equivalency Council of the Bahamas (NAECOB).

AFFILIATIONS:

- American Assembly of Collegiate Schools of Business American Association of Colleges for Teacher Education American Association of University Women American Council on Education
- Association of American Colleges and Universities Association of Governing Boards
- Association of Physical Plant Administrators—Midwest Central Association of College and University Business Officers College and University Personnel Association
- Dayton Area Chamber of Commerce Educational Testing Service
- International Association of Black Business Educators Inter-University Council of Ohio
- Miami Valley Consortium for African and African American Studies Miami Valley Higher Education Consortium Midwest College Placement Association
- National Academic Advising Association
- National Association for Equal Opportunity in Higher Education National Association of College Admissions Counselors
- National Association of College Deans, Registrars and Admissions Officers National Association of College and University Business Officers
- National Association of Educational Buyers National Association of Student Personnel
- Administrators National Black Child Development Institute
- National Collegiate Athletics Association (NCAA) Ohio Association of College Admissions Counselors
- Ohio Association of College and University Business Officers Ohio Association of Collegiate Registrars and Admissions Officers

ACADEMIC PROGRAMS

COLLEGE OF BUSINESS

Accounting, BS

Business Administration, BS
- Agribusiness
- Entrepreneurship
- Finance
- Hospitality Management
- International Business
- Management
- Management Information Systems
- Marketing

Masters of Business Administration, MBA

COLLEGE OF HUMANITIES, ARTS, SOCIAL SCIENCES, and EDUCATION (CHASE)

Agricultural Education, BS
- B.S. Agricultural Education (Licensure)
- B.S. Agricultural Education Extension
- Online Agricultural Education Extension Certificate

Educational Studies, BSE
Integrated Language Arts, BSE
Integrated Mathematics Education, BSE
Integrated Social Studies Education, BSE
Intervention Specialist Education, BSE
Life Sciences Education, BSE
Middle Childhood Education, BSE
Primary (PK-5), BSE
Physical Science Education, BSE
Recreation, BS

CHASE (continued)

Art Education, BS
Communications
- Journalism and Digital Media BA

Criminal Justice, BS
English
- Literature, BA
- Pre-Law, BA

Art, BA
- Graphic Design
- Studio Art

Humanities, BA
- Interdisciplinary Studies
- History

Jazz Studies, BM
Music, BM
- Jazz Studies
- Music Education
- Music Performance

Political Science
- Public Administration BA

Psychology, BA, BS
Social Work, BA, BS
Sociology, BA, BS
Studio Art, BA

COLLEGE OF ENGINEERING, SCIENCE, TECHNOLOGY, and AGRICULTURE

Biology, BS Chemistry, BS
Computer Science, BS
Environmental Engineering, BS
Exercise Science, BS
- Sports Performance
- Wellness
- Clinical

Industrial Technology
- Computer Technology, BS
- Manufacturing Management, BS Manufacturing

Engineering, BS
- Mathematics, BS

Sustainable Agriculture, BS
Water Resources Management, BS

ACADEMIC CERTIFICATES

Agricultural Extension Education (Online Only)
Commercial Music and Technology
Cybersecurity
Semiconductor Processing
Spanish

ACADEMIC MINORS

Minor in Africana Studies requires a minimum of 19-21 credit hours, including AFS 1200; IDS 2100; two courses focused on arts and literature of the African Diaspora; two courses focused on the history and philosophy of the African Diaspora; at least one course focused on Africa or non-U.S. African Diaspora (i.e., South/Central America, Caribbean), and any other course from a list of relevant university courses, in consultation with the student's advisor	**Minor in Biology** requires BIO 1801, BIO 1802 and at least one elective from the following list up to a minimum of 16 credit hours: BIO 2000, Bio 2350, BIO 2650, BIO 3500, BIO 3660, BIO 3050, BIO 3550, and BIO 3150. A grade of "C" or better in these courses is required.
Minor in Business is available for students majoring in other areas. The minor consists of 24 semester hours and includes the following required courses: ACC 2210, BUS 1100, BUS 1500 or CPS 1110, BUS 2200, BUS 2400, BUS 2353, BUS 3331, and ECO 2210.	**Minor in Chemistry** requires CHM 1201, CHM 1202, CHM 2200, CHM 2401, and one of the following courses at the 3XXX or 4XXX level (CHM 3100, CHM 3501, or CHM 4200). A grade of "C" or better in these courses is required. Students are advised to check for prerequisites on these courses.
Minor in Communication - Journalism and Digital Media requires 20-21 credit hours including COM 2200, 2272, COM 3315, COM 4894; 6 additional credit hours of Journalism and Digital Media courses, and a 2-3 credit hour courses from a selected department Communication majors may not minor in this area.	**Minor in Computational Science** — COE 2255; CPS 1192, CPS 3330; CPS 3450; MTH 3310 and a CSI Science or Engineering 3-hour elective. Electives: CPS 2680 or CPS 3465 or MTH 3110. **Minor in Computer Hardware Technology** – 14 required credits. Requires 11 credits in mandatory courses and 3 credits in elective courses. Mandatory courses (11 credits): INT2311, INT3520, and INT3630. Elective courses (3 credits): CPS2271, CPS3330, CPS4210, INT4220, or INT4230
Minor in Computer Science requires a minimum of 15 semester hours in Computer Science including CPS 1000, CPS 1191, CPS 1192, CPS 2271, and CPS 3200; and 9 hours in Mathematics including MTH 2502, and MTH 2503.	**Minor in Creative Writing –** Requires a minimum of 21 credit hours as follows: ENG 2200, ENG 3006; ENG 3540 or ENG 3550; and remaining hours from Humanities department courses in writing, language, and literature chosen in consultation with the student's advisor.
Minor in Criminal Justice requires a minimum of 24 semester hours in Criminal Justice to include CRJ 2210, CRJ 2310, CRJ 2330, CRJ 3310, CRJ 3340, CRJ 4655; SOC 3333. and additional courses selected in consultation with the academic advisor. Criminal Justice minors will also have to complete 4 hours of any natural and physical science from list D, which must include a lab. A grade of "C" or better is required for all Criminal Justice courses, as well as SOC 3333.	**Minor in Environmental Humanities** examines the interconnectedness of life, humanity, and the environment. It requires a minimum of 18 credit hours with 12 being required from the following: IDS 1400; IDS2100; at least two courses focused on the environment from the perspective of the humanities; and two courses from a menu of relevant science courses.

Minor in Environmental Science requires a minimum required core of 26 credit hours including a core of 17 hours consisting of BIO 1500, BIO 3500; CHM 2200; WRM 2200 and WRM 3330; and additional 9 hours minimum from elective courses BIO 2000, BIO 2050, 2650, BIO 4200, BIO 4300; CHM 2401, 4200; GEL 2205; MTH 2001; WRM 3306, WRM 3310 and WRM 4435. Students are advised to check for prerequisites on these courses. A grade of "C" or better in these courses is required.	**Minor in Exercise Science** requires a total of 16 credit hours. Required Courses: EXS 1100 and HHP 3340. Students will choose 9 hours from the following courses: EXS 2XXX, EXS 4422, EXS 3100, HHP 3326, HHP 3312 and HHP 3318.

Minor in Forensic Science requires CHM 1610, CHM 2200, CHM 2600, CHM 4200, and CHM 4600, total of 20 credit hours.	**Minor in French** requires 20 – 22 credit hours including completion of the University's B.A. language requirements (ILC 1141 and ILC 1142) and the following courses taken in sequence: ILC 2241, ILC 2242, ILC 2294. The minor also includes one language elective: either ILC 3300 (focusing on French Translation) or ILC 3341 (focusing on French literature). A grade of "C" or better is required for all courses taken in the minor.
Minor in Gender and Sexuality Studies requires at least 18 credit hours, including IDS 1500 Introduction to Gender and Sexuality Studies; IDS 2100; two gender and sexuality studies-focused courses in the humanities; and two gender and sexuality studies-focused courses in the social sciences. Substitutions may be made in consultation with the student's advisor.	**Minor in Gerontology** requires a minimum of 20 semester hours to include the following courses: BIO 2200; SOC 2230; PSY 3385 and SOC 4596. Additional elective courses may be selected from SOC 3370, SOC 3380; SWK 3320; HHP 1202, HHP 2230, HHP 3301, HHP 3361, HHP 4401; PSY 2320, PSY 3380, & PSY 3420, in consultation with the academic advisor. A grade of "C" or better is required in all courses taken for the minor.
Minor in History requires a minimum of 24 credit hours in history courses chosen in consultation with the student's advisor.	**Minor in Literature** requires a minimum of 21 credit hours as follows: ENG 2200, ENG 3100, and remaining hours from Humanities department courses in literature chosen in consultation with the student's advisor.
Minor in Mathematics requires a minimum of 27 semester hours including MTH 2502, MTH 2503, MTH 3001, MTH 3002, MTH 3110, CPS 1191 and one additional mathematics elective.	**Minor in Military Science** requires 18 hours of course work as follows: BUS 1500, COM 3310 or COM 3326, MIL 3511, MIL 3512, MIL 4511, MIL 4512
Minor in Nuclear Engineering requires four (4) Nuclear Engineering courses (12 hours), and a NUE practicum (3 hours), while using two (2) additional courses (6 hours) to draw on current courses in the disciplines of science, mathematics, computer science, manufacturing engineering, environmental engineering, industrial technology, and business administration for a total of 21 semester hours beyond the student's requirement in the major.	**Minor in Nutrition** requires a minimum of 18 credit hours. Required courses include: EXS 1200, EXS 2202, EXS 3300 or EXS 3302. Choose 10 credit hours from the following: EXS 3300 or EXS 3302, HHP 1202, EXS 3XXX, PSC 1140, AGR 1150 and AGR 2350.

Minor in Philosophy and Religion requires a minimum of 18 credit hours including PHI 2210, PHI 2240, PHI 2250 and PHI 3300. A minimum of two electives totaling 6 credit hours.	**Minor in Political Science** requires a minimum of 20 semester hours in Political Science including PSC 1100, PSC 2223, PSC 3304, PSC 3381, and SOC 2206. At least nine of the remaining hours are to be taken from 3000 or 4000 level courses. A grade of "C" or better is required in all Political Science courses.

Minor in Pre-Law Interdisciplinary requires a minimum of 24 credit hours. BUS 2200, ECO 2200, HIS 2202, LAW 1100, PHI 2240, PSC 3381 plus one course from the following: ACC 2210, COM 3326, CRJ 3340, ENG 3100, ENG 4200, HIS 4371, HMP 3310, MGT 4441, LAW, PSC 1100, PSC 1120, PSC 3304, PSC 3310, PSC 3361, PSC 4493.	**Minor in Psychology** requires a minimum of 24 hours including the following course: PSY 1100, PSY 1200, PSY 2220, PSY 2320, PSY 3334 and SOC 2206 and additional courses selected in consultation with the academic advisor. A grade of "C" or better is required in all Psychology courses.
Minor in Public Relations requires 20-21 credit hours including COM 2200, COM 2214, COM 2219 and COM 3300; 3 additional credit hours of COM courses and 6 credit hours from select departments. Communication majors may not minor in this area. **Minor in Spanish** requires a minimum of 21 credit hours. Required courses include ILC 1131, ILC 1132, ILC 2231; as well as three elective courses in the areas of Spanish language, and Spanish and Latin American literatures, cultures, and history. Elective courses may include up to 3 semester hours of directed individual studies. A grade of "C" or better will be required for all Minor in Spanish courses.	**Minor in Sociology** requires a minimum of 20 semester hours in Sociology to include SOC 1105, SOC 1111 or SOC 1125, SOC 2206, SOC 2800, SOC 3800 and additional courses selected in consultation with the academic advisor. A grade of "C" or better is required in all Sociology courses. **Minor in Speech/Theatre** requires a minimum of 20 semester hours including DRM 1110, DRM 1115, and DRM 3315, COM 2214 or COM 3310 or COM 3326; and 3 credit hours from a selected department. Communication majors may not minor in this area.

Minor in Sustainable Agriculture requires 18-19 credit hours. AGR 1150, AGR 1220, AGR 2150, AGR 2450 and a minimum of 3 elective hours in AGR, AGB or INT at the 3000-4000 level.	**Minor in Water Resource Management** requires 14 credit hours of core courses WRM 2200, WRM 3330, WRM 3335, WRM 4402 and a minimum of 6 credit hours of elective courses from other WRM courses. Students are expected to familiarize themselves with the prerequisites required for each course. A grade of "C" or better is required.
Minor in International Studies requires 17 credits through one of four tracks (each 6 credits): Global History and Politics (6 credits); Global Arts, Culture, and Philosophy (6 credits); Global Business and Economics (6 credits); or Global Science and Geography (6 credits). Refer to minor's check sheet, provided by advisor. Students also take two world language (ILC) courses (8 credits) and either study abroad (IDS 2300 or other course for study abroad, 3 credits) or ILC 4491 International Virtual Exchange (3 credits).	**Minor in International Languages and Cultures** - requires a minimum of 16 credit hours of course work, comprising: two courses in a primary international language, a minimum of one course in a second international language at the 1000 level, and four additional elective credits in ILC courses. The elective credits may be offered in any language, including ILC courses in translation. New courses offered within the ILC program may be developed and offered that will fulfill these requirements. The faculty will determine on a case-by-case basis students' requests that specific courses from outside the ILC Unit be counted towards the minor.

STUDENT AFFAIRS

Dr. Ryan Griffin, Sr.

Vice Provost of Student Engagement and Persistence

Dean of Student Development

UNIVERSITY STUDENT CENTER

The University Student Center houses the following Student Affairs offices: Vice Provost of Student Engagement and Persistence, Career Services, Marauder Leadership and Engagement, Marauder Conduct and Community Standards, the Office of Student Ombudsman, and the Office of Violence Against Women. This 85,000 square foot facility also houses the Marauder Zone Barnes and Nobles Bookstore, the 500-seat Marauder Market Place cafeteria, the WOW Café, a game room, and multiple meeting spaces. This center is the hub of student life here at Central State University.

THE OFFICE OF STUDENT OMBUDSMAN

The Office of Student Ombudsman at Central State University was established in 2024 to provide a neutral, confidential, and independent resource to assist students in resolving concerns and navigating challenges within the university. The office upholds fairness and equity while promoting transparency and accountability in institutional practices.

DEAN OF STUDENT DEVELOPMENT

The Dean of Student Development Office serves an integral role in aiding in students personal, leadership, and educational development. The staff in the Dean of Student Development office (Marauder Leadership and Engagement, Marauder Conduct and Community Standards, Career Services, Residential Life, and the Office of Violence Against Women) strive to provide programs and services that enhance the collegiate experience. A champion of holistic engagement and growth, the Dean of Students is available to all students and encourages them to contact the office with questions, concerns or to express interest in being more engaged in university activities.

MARAUDER LEADERSHIP AND ENGAGEMENT

The Office of Marauder Leadership and Engagement (MLE) provides opportunities for student growth and development through educational, civic, cultural, social and recreational programs and activities implemented by the staff, student organizations, and academic departments. The MLE office creates purposeful experiences for students that promote leadership, life skills, and personal development while enhancing campus life. The MLE staff works collaboratively with other departments and student organizations to host traditional events and leadership opportunities such as New Student Orientation, Welcome Week, Pirate Week, Homecoming, Spring Fest, and the Aspiring Leadership Institute. Being involved in a student club or organization allows students the opportunity to become engaged in student life and to enrich their academic and social experiences. Central State University has numerous clubs and organizations that students may join to find their niche on campus or to meet other students with similar interests.

MARAUDER CONDUCT AND COMMUNITY STANDARDS

Central State University is committed to an academic and community environment. Central State expects all members of the university community to share in its commitment to academic honesty, personal integrity, and behavioral maturity. All students are expected to cooperate in maintaining high standards of personal conduct, social responsibility, and commitment to service. Stated objectives and regulations governing student conduct are detailed in the Student Code of Conduct Handbook and it is the responsibility of every student to become knowledgeable of these regulations.

Standards set forth in the Student Code of Conduct Handbook are carefully written and regularly reviewed by a committee of students, faculty, and staff members. The Code of Student Conduct Handbook is available online through the Central State University website. Attending Central State University is a privilege, not a right, and may be forfeited by any student who does not abide by the regulations of the University or who is unwilling to adjust to the University environment through responsible conduct of high moral and ethical standards. Thus, students who violate the Student Code of Conduct are subject to the judicial process that may result in disciplinary consequences (arranging from community service to expulsion).

OFFICE OF CAREER SERVICES

The Office of Career Services provides quality professional career counseling and career/life planning programs and experiential opportunities to all students. Career Services achieves its goals by making available the following services: Career Fairs, career counseling, on-campus interviewing for full-time prospective graduates and student teacher placement, networking, referrals, credential services, on-line graduate school information, career-related brochures/handbooks, up-to-date career writing and interview techniques. In addition, job referrals and career related services are available for alumni. Students are highly encouraged to attend programs and utilize office services beginning in their freshmen year. All students who utilize Career Services must submit a professional résumé and register on Handshake at www.joinhandshake.com. To clear for graduation, prospective candidates must complete the Graduate Exit Form.

COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program at Central State University provides practical training, responsible management experiences and attitude development required for permanent job placement in career fields matching the student's interest and potentialities. Central State University Office of Career Services set the general guidelines and educational objectives for the program and place students in co-op positions providing maximum educational advantage. Career Services also provides an on-going student counseling and advisement service to assure a positive relationship among students, employer, and the University. The University attempts to match students with assignments that are related to their career objectives, thus providing experiences that enhance knowledge acquired in the classroom. Once a Cooperative Education training assignment has been approved, the student must register and pay for co-op credits and fees the same as for any other course. Students holding part-time or full-time jobs may register for academic credit. There are two types of co-op plans:

- Parallel Co-op: A parallel co-op is like a part-time job. The student enrolls in classes part-time (6 semester hours) and works 20 hours a week each semester. The student receives 6 semester credit hours for the parallel co-op.
- Alternating Co-op: With an alternating co-op, the student alternates semesters between full-time work and full- time study. Students receive 12 semester credit hours for alternating co-op. Both plans are used by participating co-op employers and can be structured to fit any company's need.

Student Eligibility

To be eligible for the Co-op Program, students must:

1. Have attained sophomore standing.
2. Have declared a major.
3. Submit a resume.
4. Sign the Buckley Amendment.
5. Have a minimum cumulative grade point average of 2.0. (The minimum average is subject to change pending employer requirements.)
6. Secure approval from the Academic Advisor or Department Chairperson, and from Career Services.18
7. Participate in on-campus interviews to acquire assignment (optional).

NOTE: Transfer students must have attained sophomore standing and have completed one full-time semester at Central State University to be eligible for co-op. Cooperative Education is open to all majors/options. Consult the Department Chairperson within your discipline for eligibility.

Academic Credit

Academic credit is awarded as follows:

1. The student will receive a grade of credit (CR) or no credit (NC) for cooperative education. A final report and employer evaluation must be submitted and approved by a co-op counselor at the end of the assignment before credit (CR) is awarded. Co-op credit will appear on the transcript as “Earned Hours” and will have no effect on cumulative grade point average.
2. The student must be officially registered within the semester of the assignment to receive co-op credit. Credit is not awarded retroactively.
3. The student may participate in more than two co-op assignments; however, additional credit hours will not count towards graduation.
4. The decision whether co-op hours will substitute for other hours in the major is at the discretion of the Academic Advisor, Chairperson, Dean and Registrar.

Registration

After confirmation of a co-op assignment:

1. Pick up registration form from co-op counselor, academic advisor, or the Office of the Registrar.
2. Obtain signature from the co-op counselor located in the Career Services Center.
3. Officially enroll in one of the following course numbers for parallel co-op for 6 semester hours: COE 2255-01 (students with 30-60 semester hours); COE 3355-01 (students with 61-90 semester hours); COE 4455-01 (student with 91+ semester hours)
4. Officially enroll in one of the following course numbers for alternating co-op for 12 semester hours: COE 2299- 01 (students with 30-60 semester hours); COE 3399-01 (students with 61-90 semester hours); COE 4499-01 (student with 91+ semester hours)
5. Complete registration at the Office of the Registrar.
6. Meet with co-op counselor to obtain information packet.
7. Verify that financial aid award letter, fees and semester registration are complete. The co-op assignment is not final until this verification.

NOTE: The student may select any semester to participate in co-op. However, a co-op student may not enroll in more than 18 hours including the co-op hours.

INTERNSHIPS

All students are encouraged to complete an internship before graduation. Internships increase opportunities for job placements through experiential learning. There are various types of internships: Regular, Summer and Business. Interns are college students selected by companies/agencies to work in their field of study prior to graduation. A regular internship may consist of full or part-time employment and may take place during the academic semesters September through June. A summer internship occurs during the period of May through August. Credit cannot be awarded to students participating in a regular or summer internship if their department does not offer a credit option within their curriculum. Business Internship credit is available only to students selecting a major/option in the College of Business.

STUDENT HEALTH and WELLNESS CENTER

The Student Health Clinic offers health care services for illness, injury, and wellness needs of Central State University students. Student Health Services is located on the west side of the campus in the Lackey-Lee building attached to the Louis Stokes Building and is open M – F, 8 AM – 5 PM. The Clinic is staffed by a board-certified family physician, a certified nurse practitioner, and two medical assistants.

All full-time students (12+ credit hours) are charged a fee for school supported health insurance. There is an online option to waive this coverage and fee, *if* you can provide the insurance company with proof of other current health insurance. Part-time students (with less than 12 credit hours) may purchase a health insurance plan.

CSU recommends that you contact your current health insurance company prior to making the decision to waive (opt out). Please call the 1-800 number on your insurance card to determine what they will cover, and if there are any providers/pharmacies in this area who will accept your current insurance.

If you choose to waive the CSU sponsored health insurance, you will be personally responsible for any fee associated with visits to doctors, clinics, urgent care centers, and emergency rooms. The CSU Health and Wellness Center does ask for proof of insurance at every visit and may bill your outside insurance.

In general, out-of-state Medicaid plans are only accepted for emergencies and not for routine care and prescriptions. If you think you may be eligible for Ohio Medicaid, please contact the staff in the Health and Wellness Center. They can help direct you in this process. You may visit https://medicaid.ohio.gov/FOR-OHIOANS/Get-Coverage/How-to-Apply- for- Medicaid for expert help as well.

The on-line waiver application site is available each summer for new and returning Fall students. Insurance coverage is for an entire academic year. A charge is applied to your account each semester. Students who enter CSU in the Spring semester will be provided information during the admission process. Reminder emails will be sent to your CSU email only.

To learn more about the CSU Student Health Insurance Plan or to apply for the waiver using the waiver link please visit: www.wellfleetstudent.com Students should also read their CSU emails for important updates about the waiver process and deadlines for submission.

COUNSELING SERVICES

Counseling Services is in the Lackey-Lee Building, which houses the Student Health and Wellness Center on Brush Row Road. Counseling Services personnel include licensed, experienced counselor(s) and a program manager. All counseling records are CONFIDENTIAL and kept apart from other student records at CSU. Information contained in these records will not be revealed to any other person or agency without the written consent of the student.

Regular office hours are from 8:00 a.m. until 5:00 p.m., Monday through Friday. For assistance after hours and on weekends, Resident Advisors and Residence Hall Coordinators are available to assist students. For life-threatening emergencies, students are advised to call "911". The Counseling Services department offers counseling, assessments, crisis intervention, suicide prevention training, alcohol and drug counseling, post hospitalization follow-up, loss & grief counseling, classroom & residence hall presentations, court-ordered counseling to students and consultation to faculty, staff & resident advisors. In addition, Counseling Services is equipped with a relaxation room and a study resource room. All services are FREE to all enrolled CSU students.

OFFICE OF ACADEMIC EMPOWERMENT AND ACCESSIBILITY (Formerly "Disability Services")

Mission and Support:
The mission of the Office of Academic Empowerment and Accessibility (OAEA) is to provide and coordinate support services and programs that enable students with disabilities to maximize their educational potential. This office also serves as a resource to all members of the University community so that all students with disabilities can freely and actively participate in all facets of university life.

Central State University, in conjunction with the OAEA, strives to provide, within reason, appropriate resources, services and auxiliary aids to allow each qualified person with a documented disability equitable access to educational programs, social experiences and career opportunities. A disability is defined as any condition that substantially limits one or more of life's major activities. "Major life activities" include such functions as major bodily functions, caring for oneself, performing manual tasks, seeing, hearing, eating, speaking, sleeping, walking, standing, lifting, bending, learning, reading, communicating, concentrating, thinking, and working. The condition may be permanent or temporary.

Requesting Accommodations
Any student (new, transfer or continuing) who has a disability and would like to request reasonable accommodations must contact the OAEA to self-identify and participate in the interactive process to provide appropriate documentation of the disability from a qualified professional based upon documentation guidelines from the OAEA. This interactive process also includes the completion of office forms and attending an Intake Meeting/Interview. Participation in requesting and accessing services each semester is strictly voluntary and accommodations are coordinated on a case-by-case basis through the OAEA. ***Accommodation is not retroactive, and they do not transfer from semester to semester.*** Even though students may access the OAEA at any time during any given semester, students who select to request services are encouraged to access the office as early as possible, such as upon initial enrollment at the University or during the first few weeks of a semester.

Request Timelines for Specific Accommodations
All types of services and accommodation may be requested at any time. However, students who voluntarily select to request accommodations associated specifically with housing or emotional support animals are highly encouraged to submit their request to the OAEA by the following timelines:

Housing Accommodation Due to A Medical Condition
A student requesting housing **accommodation** must adhere to all residence life expectations to secure housing in advance, including room selection, meeting deadlines and the submission of any required deposit based upon your room selection. It is further understood that a request does not guarantee a specific resident hall or roommate. A request for housing accommodation will be considered based on the student's documented medical need, campus availability and on a case- by- case basis. Please be advised that requesting housing accommodation is a totally separate process from applying for housing through the Office of Residence Life. All housing requests are highly encouraged to be submitted by the following dates associated with the term/year of occupancy:

Fall Semester: By July 1 **Spring Semester:** By December 1
Summer Semester: By May 1

Requests submitted after the deadline

- CSU cannot guarantee that late requests will be approved to meet the individual's accommodation needs for that semester or term of occupancy.
- If accommodation can be made, the determination may occur after the student has moved on campus. Once approved, the student is responsible for working with residence life staff to ensure a seamless transition to the newly assigned space with the accommodation(s).

Requests from students who already reside in university housing:

- A student who resides in campus housing and desires to apply for housing accommodation must contact the OAEA to complete the request and submit required documentations as soon as practically possible.
- CSU cannot guarantee that the accommodation need(s) will be met during the semester or term in which the request is received, and those requests may be held over until the following term, if appropriate.
- If an accommodation can be made, and the student is residing in the residence halls at the time of approval, the student is responsible for working with residence life staff to ensure a seamless transition to the newly assigned space with the accommodation(s).

Service and Emotional Support Animals

While **service animals** are permitted to accompany individuals with disabilities in public facilities, individuals seeking to reside with their service animal in University housing are asked to work with the Office of Academic Empowerment & Accessibility (OAEA) and the Office of Residence Life to ensure the animal is in good health, to facilitate information sharing and to ensure the appropriate assignment of housing occurs before moving in the resident halls on campus. Notification of a service animal living with a student in the resident halls is voluntary, but highly recommended.

The first step for a student to be permitted to have an **emotional support animal (ESA)** in University housing is to contact the Office of Academic Empowerment & Accessibility (OAEA) to discuss the request. Once self-disclosure has been made by the student, the OAEA will provide forms, documentation requirements and relevant information associated with the interactive process for requesting accommodations and services. ESAs are not permitted on campus until the accommodation request has been approved. Students found with an unauthorized animal in the residence hall or anywhere on campus, including being confined to a vehicle, may be subject to sanctions under the Student Code of Conduct, including the removal of the animal and other applicable sanctions by Campus Police.

Due to the potential length, required documents and roommate notifications associated with the interactive request process, all requests for ESA's in campus housing are highly encouraged to be submitted by the following dates associated with the term/year of occupancy:

Fall Semester: By July 1
Spring Semester: By December 1
Summer Semester: By April 1

If the ESA is approved through the OAEA, the student must agree to contractual guidelines for maintaining an assistance animal within the Central State University residential community.

Requests submitted after the deadline:

- CSU cannot guarantee that late requests will be approved to meet the individual's accommodation needs for that semester or term of occupancy. Late requests may be held over until the following term, if appropriate.

Requests from students who already reside in university housing:

- A student who resides in campus housing and desires to apply to have an ESA on campus or provides notification of a service animal in the residence hall, must contact the OAEA to complete the application and submit required documentations as soon as practically possible.
- CSU cannot guarantee that the accommodation need(s) will be met during the semester or term in which the request is received, and those requests may be held over until the following term, if appropriate.

INTERFAITH CAMPUS MINISTRY

The Inter-Faith Campus Ministry serves as a means of promoting an ecumenical approach to faith and spirituality for those who desire it. Its mission is to sponsor a meaningful community of worship, study, fellowship, and action. The Inter-Faith Campus Ministry provides programs, services and an environment for the spiritual growth and development of students. Every aspect of its program and ministry is directed toward deepening and strengthening the spiritual life of all who voluntarily come under its nurture and care. The Inter-Faith Campus Ministry program is supported by the following participating denominations: American Baptist Convention, the Roman Catholic Church, the American Lutheran Church, the Lutheran Church of America, the Ohio Baptist Assembly, the Episcopal Church, the United Methodist Church, the Presbyterian Church (USA), the United Church of Christ, the Christian Church (Disciples), and the Church of the Brethren.

RESIDENCE LIFE Office: Foundation Hall II (937) 376-6386

All non-married full-time freshman and sophomore students are required to live in the University residence halls if your permanent mailing address on file is outside of the 30-mile radius of campus. Junior students with an overall grade point average below 2.5 and who do not live with their parent(s) or a legal guardian are also required to live in the residence halls.

Permission to live off-campus must be obtained in writing from the Director of Residence Life and approved by the Dean of Students. Any student residing in a hall must be enrolled as a full-time student (12 hours or more credit hours is considered full-time.) Failure to maintain full-time status will result in removal from your residence hall assignment. The student will still be responsible for payment for the room for that semester.

The University agrees to assign accommodations only after a student has endorsed a housing contract, submitted a non-refundable housing application fee, and enrollment status has been confirmed for the upcoming semester. Subject to availability, the University will attempt to assign accommodations according to the student's preferences, but the University will not guarantee assignment to a particular room, residence hall or roommate.

The Central State University Board of Trustees reserves the right to make any changes or adjustments in fees and charges at any time as conditions or circumstances make the changes necessary. Room assignments are made without regard to race, color, nationality, or religion. Students wishing to be assigned with a certain roommate may request such at the time the application fee is paid. The University will attempt to honor these requests. The possibilities are improved if the reservation is sent early, and if both parties wishing to room together send their contracts at the same time.

The University provides room furniture as well as a computer outlet for each student and a cable TV outlet for each room. Each student is required to provide his/her own pillow, bed linen, blankets, bedspread, towels, study lamp, wash cloths, and personal university-approved accessories. Prohibition of certain electrical appliances (see housing contract and Student Handbook) will be adhered to. Supervision of living arrangements and food service is done with the student's health and welfare in mind. Students living in university residence halls are required to eat in the University Cafeteria. No charge is assessed for vacation periods, during which the cafeteria is closed.

No reduction or refund will be made for failure to eat in the cafeteria. Students are expected to participate in the life of the residence hall in which they live, and to set standards for themselves. The use or distribution of drugs (narcotics, hallucinogens, stimulants, depressants, etc.), except for established medical purposes determined by the prescription of a physician or the reasonable use of non-prescription medicines, is prima facie evidence of drug abuse. Violators are subject to university disciplinary action. State and federal laws prohibit the distribution of drugs except by licensed agencies. The University cannot protect student violators from prosecution by law enforcement agencies.

OFF-CAMPUS LIVING

Freshman and sophomore students are required to reside on campus unless their permanent address on file is within a 30-mile radius of campus. Juniors with a G.P.A. of less than 2.5 are also required to reside on campus. Eligible students may elect to live off campus in private housing. Rental units such as apartments or sleeping rooms with varying types of privileges are available in Wilberforce and in nearby communities including Xenia, Yellow Springs, Beavercreek, Cedarville, and Fairborn

STUDENT GOVERNMENT ASSOCIATION

University Student Center, Suite 109 (937) 376-6414 The Student Government Association (SGA) is a body of vested student representatives who serve as the voice of the student body. The SGA is comprised of an elected executive and legislative board, senators, and class council officers. The SGA also serves as the liaison between students, staff, faculty and administrators by keeping students informed through monthly mass student body meetings. The SGA has the responsibility to seek and maintain a spirit of cooperation in the activities of the university and to encourage student initiative through service. Information concerning student participation in the various phases of self-governance is detailed in the Student Handbook

MR. and MISS. CSU and ROYAL COURT

University Student Center, Suite 109 (937) 376-6414 Mr. and Miss. CSU (King and Queen) along with the Royal Court serve as role models and peer mentors for other CSU students. They are selected based on their intellect, talent, oratorical skills, poise, leadership, and service.

GREEK LIFE

University Student Center, Suite 109 (937) 376-6414 The Greek- letter organizations are identified by three categories: social, professional, and honorary. The Greek- letter organizations are governed by university rules and regulations and by the National Pan-Hellenic Council. This governing body is overseen by the Office of Marauder Leadership and Engagement. A student's involvement in a Greek-lettered organization(s) enhances the campus community and provides students with the opportunity to develop responsibility and leadership outside the classroom.

OFFICE OF VIOLENCE AGAINST WOMEN (OVW)

University Student Center, Suite 109A (937) 376-6414 Central State University is committed to creating and maintaining an environment that is free from interpersonal violence. Unfortunately, interpersonal violence, sexual violence, and stalking are a reality for some students, faculty, and staff. Central State University takes these issues very seriously. Interpersonal violence, sexual violence, and stalking are prohibited at CSU, under the Gender Based/Sexual Misconduct Policy. The Office for Violence Against Women Program is devoted to providing advocacy, support, and education to reduce the occurrence of such crimes.

OFFICE OF TITLE IX

Newsom Administration Building, Office #10B (937) 376-6563 Title IX of the Education Amendments of 1972 prohibits sex discrimination in educational programs that receive federal funding. Under Title IX, schools must address sexual misconduct and all forms of sex-based discrimination. Central State University has a responsibility to respond promptly and effectively to reports of sexual misconduct, investigate how the incident occurred and then take appropriate steps to resolve the situation, as well as ensure that the person who experienced the sexual misconduct is safe.

Students who wish to report all forms of sexual misconduct can contact the Title IX Coordinator or find Title IX

information including resources on Central State University's website. All Central State students involved in the Title IX process are entitled to be respected throughout the process, can request no contact orders, and can also request additional interim measures as deemed necessary by the Title IX Coordinator.

Enrollment and Academic Strategy

Dr. LaTonya Branham

Vice Provost of Enrollment and Academic Strategy

Central State University is committed to a policy of providing equal educational opportunity for all. In all matters, including admissions, the University adheres to a policy of nondiscrimination and welcomes applicants of any race, creed, sex, age, handicap, or national origin who wish to further their education.

All students admitted must subscribe to the University policies and procedures set forth in the *University Catalog* and the Code of Conduct as stated in the *Student Handbook*. Ethical conduct is as intrinsic to the admission procedure as it is to all other aspects of university life. Misrepresentation of credentials will lead to forfeiture of student status and all accompanying privileges.

OFFICE OF ADMISSIONS

Dr. Tammi Love

Director of Admissions and Recruitment

The Office of Admissions serves as the primary recruitment arm for all undergraduate and transfer students to the University. Recruitment occurs through visits to high schools and college fairs located in-state, out-of-state and internationally. Potential students express interest by completing an online application and the Admissions officer receives and evaluates the application for the purpose of offering admittance to the University. The Admissions Office works in collaboration with other major offices (registrar, financial aid, cash management, student health services and residence life) and academic colleges to plan and schedule Student Orientation Admissions and Registration (SOAR) events for new students who are starting in the fall or spring semesters. Annual recruitment campus events sponsored by the Office of Admissions are College Preview Day (fall) and spring Open House/SOAR. These events introduce potential students to the academic colleges, student organizations, the CSU Marching band /auxiliaries, the CSU Chorus, and includes tours of the campus/residential halls. Pirate Week occurs a week before the start of the fall semester and is for new students. The Office of Admissions is an intricate part of the SAEM staff that oversees activities that are rich in tradition with a primary focus on helping students transition to campus. The Admissions Office is located on the ground floor in the Norman E. Ward, Sr. Center which is also where visitors are greeted by the campus tour guides and student ambassadors.

UNDERGRADUATE ADMISSION PROCEDURE

Many factors are taken into consideration in the selection of a freshman class, and each candidate is viewed on an individual basis. The strength of a student's secondary preparation is an excellent measure of a student's readiness for college. Also of value are personal qualities, such as maturity, intellectual awareness, and motivation to learn. In addition to school records and personal attributes, aptitude and achievement test scores can be helpful in predicting college performance and are considered with other credentials in the application for admission to Central State University.

APPLICATION INSTRUCTIONS

Admissions applications can be completed online or in person. Students interested in attending Central State University should learn more about Admissions and Aid and submit required documents by their deadline. Students may complete an application for undergraduate, transfer, or international admission.

INTERNATIONAL STUDENT ADMISSION PROCESS

Central State University welcomes students from other countries and cultures that bring to the campus direct contact with the rich heritages of other people and nationalities. International students should complete the online Application Forms and submit them before the deadlines listed below. Students who are attending other schools in the United States should not withdraw and plan to come to Central State University until they have received a definite notice of acceptance.

Criteria for International Student Admission

For you to be considered for admission to Central State University, you must follow the instructions below. As soon as the items listed below are received, you will be informed of the admission decision.

1. Official Application

The Application Forms must be completed fully in English. All international students must apply as full-time students and must specify a major. Your application must be in our office by the following deadlines:

- Fall Semester (Starts in August) March 15
- Spring Semester (Starts in January) October 1

In order to ensure consideration for admission, we recommend you apply by the deadline. It is to your advantage to supply all requested information by the deadline. When filling out the application, you should use your complete name and be consistent in its use. Please use the same order of your first name, middle name, and last name in all your correspondence with Central State University offices. Any inconsistency in name order may prevent proper processing of your application.

To access the online Application Forms, go to https://www.centralstate.edu/international-student-admissions

2. Application Fee

All applicants to Central State University are required to submit a nonrefundable application fee of $35 in US currency. Please make draft checks or money order payable https://mycollegepaymentplan.com/centralstate to Central State University or pay online. Fee waivers are not accepted from international applicants.

3. Academic Records

Official transcripts of all secondary schools and universities previously or currently attended should accompany your application for admission. Any transcript for credits earned outside the United States must be sent to a credential evaluation agency listed below. Transcripts for credits earned in the United States do not need to be evaluated. A **high school transcript** is a record of all the courses/subjects you have completed, and the grades (marks) attained for each class of the four years of study prior to graduation from high school. An official transcript of the General Secondary School Examination administered by your country must also be submitted with your high school transcript and other documents. Send an official copy of your international transcripts to one of the following credential evaluation agencies:

- WES https://www.wes.org/
- ECE https://www.ece.org/
- Josef Silny & Associates, Inc. International Education Consultants https://www.jsilny.org/default.aspx

Request that the credential evaluation agency sends a copy of the evaluated transcripts and a copy of the credential evaluation report to:

Central State University Admissions Department
1400 Brush Row Rd
Wilberforce, OHIO 45384-1004

Photocopies of original documents must have the **signature of the registrar and the seal must be original** and separate from the photographic image. All documents not issued in English by the officials signing them must be accompanied by **notarized English translation**. All official documents must be received in our office by the deadlines outlined above.

4. English Proficiency Requirements

a. Meet the current score requirements on the Test of English as a Foreign Language (TOEFL): 500 (Paper-Based Exam), 173 (Computer-Based Exam), or 61 Internet-Based Exam. Only official test scores received directly from the testing authority ETS will be considered valid (www.ets.org).

b. Pass the IELTS (International English Language Testing System) with a minimum score of 5.5 (www.ielts.org).

c. Score a C (Pass) or better in English on the West African Examinations Council (WAEC). The score must be no more than 2 years old.

d. Score a C (Pass) or better on the Cambridge Certificate of Advanced English (CAE).

e. Score of 90 or higher on the Duolingo English Test (https://englishtest.duolingo.com/).

f. Successfully complete English language studies (Level 112) from any of the ELS Centers (www.els.com).

If you are already in the U.S. and attending a school, a university, or a college, you need to provide us with the following:

• College: Transcript indicating successful completion of 36-quarter or 24-semester credit hours of college level courses (remedial courses are not accepted).

• High School: Transcript indicating completion of 12th grade schooling and having successfully passed the 12th grade English college prep unit. ESL courses are not accepted. If you graduated from a USA high school, you are required to take the ACT or SAT at least once**.**

5. Financial Support

Central State University does not guarantee any kind of scholarship or financial assistance to international students. Therefore, it is mandated that students show proof of financial support.

Estimated expenses do not include travel expenses to and from the United States. Expenses are calculated on full -time basis for a two- semester academic year. Tuition and fees must be paid at the time of registration for courses. Room and Board fees are due at the beginning of each semester. No exceptions are made for these requirements. Students must have adequate finances to cover all expenses for the entire time that is required to earn the degree. Students with a family should budget approximately $4,000 per year for a spouse and $2,000 per year for each child. Please note that tuition and fees are subject to change. Your first month in the United States demands more financial outlay than any other single period. An additional $1,000 should be available to meet these expenses. The financial forms will be emailed to the student before the issuance of the I-20. International students must complete a financial sponsorship form including bank verification of funds, the sponsor may be the student, if he/she has personal funds, a relative, organization or government, either foreign or American.

6. Passport Photo

Please include a photo of your passport which includes your full name, birthday, and passport number.

7. Immunizations

Refer to the Student Health Services website to see the full list of health and vaccine requirements. Home (medproctor.com)

8. Emailing your I-20

Upon acceptance to Central State University, you will be issued an I-20 document. The Center for International Education will email you the I-20.

INTERNATIONAL TRANSFER STUDENTS

If you are transferring from a school within the USA, you can have your SEVIS record (I-20) transferred to Central State University. Contact the Center for International Education International@centralstate.edu to request a SEVIS transfer form. If more than 5 months have passed between enrollment periods you will be issued a new SEVIS record (I-20) and be required to pay the I-901 fee. If you are transferring from a school outside the USA, please send your transcripts to an evaluation agency listed in step 3.

COLLEGE CREDIT PLUS (CCP)

The College Credit Plus Program at Central State University provides eligible high school students multiple pathways to earn college credits while enrolled in high school. The purpose of College Credit Plus is to expose students to rigorous academic options beyond the high school classroom.

READMISSION

A student whose enrollment is disrupted for more than one academic term, excluding summer, is required to apply for readmission prior to registering for classes.

Students applying for readmission and who have attended any other college and/or university, after separation from Central State University, must follow the transfer criteria. Students are required to submit official transcripts of all college- level work completed since separation from the university.

FINANCIAL AID

Laverne Wallace
Interim Director of Financial Aid

STUDENT FINANCIAL AID

Central State University offers financial aid to all eligible students based upon financial need and academic standing. Central State University utilizes the Free Application for Federal Student Aid (FAFSA) to determine the financial aid applicant's eligibility for grants, loans, and federal work study. The FAFSA can be accessed at www.studentaid.gov. The priority deadline to receive full consideration for need based student aid for continuing students is **December 1. New Students are awarded campus-based funds, like federal work study, as long funds are available. Students selected for verification must submit all their documents by March 1.**

AWARD NOTIFICATION

Each year students are required to complete a Free Application for Federal Student Aid (FAFSA) for consideration for most types of financial aid. Students may accept or decline any portion of the financial aid award package by emailing the Financial Aid Office. All aid offers are contingent on the availability of federal, state, and institutional funds and the student's continued eligibility.

Students can view financial aid awards online via their official student email account. Students should maintain a file containing all financial aid correspondence and information, as well as all of your account statements. This will assist in answering any questions that might occur in the future.

FINANCIAL NEED

Most of the programs discussed in this catalog are awarded based on financial need. When applying for federal student aid, the information reported is used in a formula established by the Department of Education. The formula calculates the **Expected Family Contribution (EFC)**, an amount used to determine a student's eligibility to receive certain need-based aid. The Office of Financial Aid does not automatically renew your financial aid, as the EFC is recalculated each year.

COST OF ATTENDANCE AT CSU

The cost of attendance at CSU for an academic year (two semesters) is based on the assumption that a student will be enrolled full-time (12 to 18 credit hours) each semester.

Budgets are subject to change, please check with the Office of Financial Aid for current information.

****NOTE:** *Students are billed for tuition, fees, room, board (meals). Students who live off campus are not charged for room and board (meals). Full-time students who have valid health insurance are able to waive university health insurance.*

Students enrolled at part time not charged for the health insurance. Students who are full time and do not provide proof of health insurance will have health insurance charged to their account. All remaining costs illustrated in the cost of attendance (i.e., transportation, books and supplies, miscellaneous) are all amounts that students should budget for out of pocket.

THE FINANCIAL AID NOTIFICATION

The Office of Student Financial Aid has developed a philosophy of awarding various types of aid to students that is designed to meet several objectives given the resources available.
The objectives are:

1. Meeting the needs of as many students as possible.
2. Awarding each student the best combination of funds available.
3. Awarding the total amount of funds available during the award period.
4. Awarding funds according to donor specifications.

AWARDING AID ON THE BASIS OF HOURS ENROLLED

During the academic year, your financial aid award will be based on the number of hours for which you are registered. Unless the student has indicated otherwise, it is assumed that the student will be enrolling as a full-time (minimum of twelve credit hours) degree seeking student each semester. The award notification letter outlines the exact types and amount of aid received for each period of enrollment during the academic year.

For those students who are enrolled less than full-time, all affected aid will be reduced. Other aid (*i.e.*, state grants or outside full-time scholarships) that require full-time attendance may be cancelled. For example, if you enroll for six hours, some aid for that semester may be reduced to one-half the amount of aid for which you would be eligible as a full-time student. Students receiving loans must be enrolled in a minimum of six credits.

ADJUSTMENTS TO FINANCIAL AID AWARD

Verification

The Department of Education can select students for a process called verification. Verification is to ensure that students are getting the proper amount of financial aid based on the information provided in the FAFSA. To complete the verification process, students and parents are required to submit documentation supporting the information they used to complete the FAFSA application via an online process. Once verification is complete, if there is a change in the student's EFC, their financial aid awards may be adjusted to accommodate the new EFC. Students can review their official student account at any time for adjustments made to their Financial Aid award.

Over Awards and Aid Reductions

Receipt of outside awards and/or resources will result in a review of your financial aid package to ensure that the student is not over-awarded. An Over Award happens when a student has more aid than the published Cost of Attendance. Over awards are usually the result of the student receiving aid that the Financial Aid Office was not aware of when it completed the student's financial aid package and/or processed a loan application for the student.

When the total of all aid received by the student exceeds the student's cost of attendance budget, awards in the package will be adjusted (cancelled or reduced) in order to eliminate the over award. Federal Work-Study awards and loans will be reduced before any reduction is made to scholarship or grant awards.

Students can have their financial aid award reduced due to, but not limited to, 1) no remaining unmet need, 2) reduction in hours enrolled, 3) loss of eligibility for a particular award, and 4) withdrawal (including non-attendance) from class(es).

Withdrawals

Withdrawals from the university: https://www.centralstate.edu/sites/default/files/2023-05/TotalWithdrawalForm.pdf

Official Withdrawal: A student who registered for classes can make the decision to withdraw from all classes during a specific term. If the student received Federal financial aid, the University, required by Federal regulation, calculates the amount of Federal funds the student has earned in a term at the point they withdrew. This process is known as "Return of Title IV Funds" (R2T4). The amount of funds that are earned by the student is based on a percentage of the number of days during the semester the student completes. Funds that are determined to not to have been earned by the student are then returned to the Department of Education and any balance would then be owed to the University.

Unofficial Withdrawal: Students who do not pass at least one class during a given term are determined to have "unofficially withdrawn" from the University. These students will have their R2T4s completed per Department of Education guidelines. This requires that the calculations be completed using either 50% completion percentage or a student's last date of documented academically related activity.

Z Grades

Students earn a Z grade if they have registered for a class and the instructor determines that the student had not begun attendance. Students receiving a Z grade will have their total hours adjusted in the Financial Aid Module to exclude hours for which a Z grade was entered. Federal regulations require that to be eligible for financial aid a student's attendance must be verified. No financial aid can be disbursed for those hours in which attendance cannot be confirmed. For example, a student who is enrolled for 15 hours and receives a Z grade in a 4-hour class would have their financial aid adjusted to 11 hours. This would take the student below full-time attendance and adjustments to the Federal Pell Grant and any affected aid would be made. This adjustment could result in the student owing a balance to the University.

Default

A loan is in default when the student borrower fails to pay several regular payments on time or otherwise fails to meet the terms and conditions of the loan. For instance, a borrower who is 270 days late on a federal education loan is considered to be in default. When a borrower is in default the loan becomes due in full immediately and the lender may pursue more aggressive collection techniques, such as sending the account to a collection agency or filing a suit against the borrower. If you default on a loan, the university, the holder of the loan, the state government and the federal government can take legal action to recover the money, including garnishing your wages and withholding income tax refunds. Defaulting on a government loan will make you ineligible for future federal financial aid, unless a satisfactory repayment schedule is arranged, and can affect your credit rating. There are various repayment options available to borrowers. Please visit studentloans.gov to review the list of available repayment options.

CHANGE IN FINANCIAL SITUATION

Your family's financial situation may change after you submit your FAFSA. In the event of a substantial change in your family circumstances (such as a loss of employment or the death of a parent), you should notify the Office of Financial Aid immediately to request a re-evaluation and possible adjustment to your award. You must complete an appeal and provide documentation of your change. Depending on the change of family situation, the documentation required can be several years of tax documentations, W2's, death certificates, proof of residency and household size. Your appeal must describe the change in detail, specifying the changes in dollar amounts. Any adjustment in your aid award is contingent upon your eligibility according to program regulations and the availability of funds.

FEDERAL WORK STUDY (FWS)

The Federal Work-Study Program involves a part-time job on campus, which gives the student an opportunity to gain work experience and earn extra money to help meet educational expenses. Student positions can be in a variety of areas such as administrative services, student activities and lab assisting. Students must visit Human Resources in order to apply for open positions Students cannot work more than 20 hours per week while classes are in session. The student may work up to 40 hours per week when classes are not in session at the discretion of the supervisor. To be determined eligible, 1) The student must complete the FAFSA by the priority deadline, 2) Must demonstrate financial need, as determined by the FAFSA application, and 3) For returning students, maintain a minimum grade point average of 2.0. Funding is limited and there is no guarantee for job placement.

FINANCIAL AID PAYMENTS TO STUDENTS

Federal Loan funds are not being credited to your account until you have completed and signed a Master Promissory Note (MPN) and completed Loan Entrance Counseling. Scholarships, grants, and loan funds are disbursed to your account on the 14th day of the term pending confirmed attendance. Federal Work Study (if earned through on-campus employment) is received in the form of a paycheck every two weeks beginning approximately four weeks after you begin campus employment for the hours worked. Other aid listed on the award letter, such as outside scholarships, are credited to the account upon receipt. For first-time borrowers, there is a 30-day delay in the disbursement of their financial aid.

BOOK ADVANCES

Books are an out-of-pocket expense unless the amount of the approved financial aid is greater than the number of direct charges.

A book advance is an advance to a student on their expected financial aid refund for the purpose of purchasing books and other school related supplies from the bookstore**.** If eligible, the maximum amount provided for book advances is $750.

https://www.centralstate.edu/textbooks-and-course-materials#chapter=chapter-24196-Open-Educational-Resources-OER-courses-

STUDENT RIGHTS

You have the right to:

Know what financial aid is available, including information on all federal, state, and institutional financial aid programs.

- Know the deadlines for submitting applications for each of the financial aid programs available.
- Know the cost of attending the institution and the school's refund policy.
- Know the criteria used by the institution to select financial aid recipients.
- Know how the school determines your financial need.
- Know what resources (such as parental contribution, other financial aid, your assets, etc.) are considered in the calculation of your need.
- Know how much of your financial need, as determined by the institution, has been met.
- Request from the Office of Student Financial Aid an explanation of the various programs in your student aid package. If you believe you have been treated unfairly, you may request reconsideration of the award which was made to you.
- Know what portion of the financial aid you received must be repaid and what portion is grant aid.
- Know what the interest rate is, the total amount that must be repaid, the pay back procedures, the length of time you have to repay the loan, and when repayment is to begin.
- Know how the school determines whether you are making satisfactory progress, and what happens if you are not.
- Know that the Department of Public Safety provides for all interested students and parents a leaflet

entitled “Safety, Health, and Law Enforcement Information” in accordance with the Crime Awareness and Campus Security Act of 1990.

- Know that the Office of the Dean of Students provides the “Student Handbook” which details the special facilities and services available to handicapped students.

STUDENT RESPONSIBILITIES

It is your responsibility to:

- Review and consider all information about the school’s program before you enroll.
- Complete all application forms accurately and submit them on time to the right place.
- Pay special attention to and accurately complete your application for student financial aid. Errors can result in long delays in your receipt of financial aid. Intentional misreporting (misrepresentation) of information on application forms for federal financial aid is a violation of the law and is considered a criminal offense subject to penalties under the U.S. Criminal Code.
- Return all additional documentation, verification, corrections, and/or new information requested by either the financial aid office or the agency to which you submitted your application.
- Read and understand all forms that you are asked to sign and keep copies of them.
- Accept responsibility for all agreements you sign.
- Notify the lender of changes in your name, address, and enrollment status.
- Perform the work that is agreed upon in accepting a federal college work-study award.
- Know and comply with the deadlines for application or re-application for aid.
- Know and comply with your school’s refund procedures.
- Know your responsibility to read and adhere to the Office of Financial Aid Satisfactory Academic Progress Standards (SAP**).**

TYPES OF FINANCIAL AID

The Student Financial Aid Office at Central State University offers four basic types of financial aid:

- Grants: Are gift aid and do not have to be repaid. Most grant aid is based on financial need.
- Scholarships: Are gift aid and are based on students meeting particular criteria. Scholarships may be need or merit based.
- Loans: Low-interest aid that is borrowed and must be repaid six months after borrower ceases to be enrolled at a post-secondary institution at least half-time. In accepting a loan, students need to be aware of the repayment implications.
- Federal Work Study: Aid earned hourly through employment on campus. The student is paid bi-weekly through a paycheck. Money earned is not directly applied to the student account.

STUDENT AID AND SCHOLARSHIPS AT CSU

Federal Grants

Federal Pell Grant

Description and Term: A direct grant from the federal government through CSU awarded to undergraduate students demonstrating financial need.
Application: Complete a Free Application for Federal Student Aid (FAFSA).
Selection: Based upon a student’s Estimated Family Contribution (EFC).

Federal Supplemental Education Opportunity Grant (FSEOG)

Description and Term: A federal grant awarded to full-time students with exceptional financial need.
Application: Complete Free Application for Federal Student Aid (FAFSA).
Selection: Federal Pell Grant eligible students who meet the priority deadline are considered first. Funding is limited.

Loans

Federal Parent Direct Loans (PLUS)

Description and Term: Loans available to parents for dependent undergraduates. Repayment begins 30 days after disbursement, unless deferred through the Department of Education. Interest Rates are fixed for all new PLUS Loans at a rate of 7.54%.
Maximum amounts: Parents may borrow amount up to the cost of attendance per year per eligible dependent student.
Application: Complete Free Application for Federal Student Aid (FAFSA) www.STUDENTAID.GOV and Parent PLUS loan application www.STUDENTAID.GOV.
Selection: Credit-worthy parents of undergraduate students.

Subsidized Federal Direct Loans

Description and Term: Need-based loan borrowed through federal government. Repayment begins six months after borrower ceases to be enrolled at least half time or graduates. The government pays the student's interest while student is enrolled in college at least half-time. Once in repayment, interest applies.
Maximum amounts: Undergraduates: 1st year $3,500; 2nd year $4,500; 3rd year and 4th year $5,500
Application: Complete Free Application for Federal Student Aid (FAFSA) at www.STUDENTAID.GOV.; Complete Entrance Counseling and Master Promissory Note at www.STUDENTAID.GOV
Selection: Based upon a student's EFC.

Unsubsidized Federal Direct Loans

Description and Term: Loan available to all students regardless of need or income. The terms are similar to the Subsidized Direct Loan except the borrower is responsible for paying all of the interest. Unlike the Subsidized Federal Direct Loan Program, the borrower can make monthly or quarterly interest payments or "capitalize" the interest. "Capitalizing" means the lender will add accrued interest to the principal while the borrower is enrolled in school. Repayment begins six months after borrower ceases to be enrolled at least half time or graduates.
Application: Complete Free Application for Federal Student Aid (FAFSA) at www.STUDENTAID.GOV. Complete Entrance Counseling and Master Promissory Note at www.STUDENTAID.GOV
Selection: All eligible applicants receive aid.

Scholarships

Institutional Scholarships

Description and Term: Institutional scholarships include band grants, choir grants, ROTC grants, athletic grants, Freshman Scholarship, Upper Class Scholarship, and Presidential Leadership and **Service Award Scholarship.**
Application: Each department will have their own application and selection process for the scholarships listed above.

Private Donor Scholarships

Description and Term: Private donor scholarships are awarded to students based on academic merit, financial need, and/or other donor specifications.
Application: *Contact Institutional Advancement Office.*

Student Employment

Federal Work-Study (FWS)

Description and Term: Part-time jobs on campus.
Eligibility: Date the FAFSA is completed, financial need, and minimum grade point average of 2.0.
Application: Complete Free Application for Federal Student Aid (FAFSA).
Salary: Will be at least the current federal minimum wage.
Students awarded Federal Work Study are not guaranteed employment.
Funding is limited.

SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID

Federal financial aid funds are awarded with the understanding that students will make progress toward their chosen degree. Central State University, as directed by the U.S. Department of Education, has established Standards of Satisfactory Academic Progress that students must meet in order to receive Title IV student aid.

Standards of Satisfactory Academic Progress apply to the following types of federal financial aid: Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (SEOG), TEACH Grant, Federal Work-Study, Federal Direct Loans, Federal Graduate PLUS Loan, and Federal Parent PLUS Loan.

What are the standards of Student Academic Progress that I am expected to meet?

Undergraduate Student Standards

The Standards of Satisfactory Academic Progress for undergraduate students has two measures: qualitative and pace.

Qualitative Measure

Cumulative Grade Point Average (CGPA):

As a student, you will know if you are meeting SAP requirements based on your cumulative GPA. The required GPA to maintain SAP is a 2.0.

Pace Measure

Completion Rate Requirements (Pace):

You must successfully complete at least two-thirds (67%) of your total cumulative credit hours attempted[1].

Students are required to complete their degree at Central State University within one and a half times the length of their academic program (150% of the published length of the educational program). For instance, a student typically has six years to complete a four-year degree. However, consideration is given to the student's enrollment status i.e., part-time and full-time.

What happens if I don't meet the SAP requirements?

If you are not meeting one and/or both of the measures of SAP, your financial aid will be suspended.

Can I appeal an SAP decision?

Yes. You have the right to appeal if you are experiencing extenuating circumstances. Appeal forms are available online.

Satisfactory Academic Progress Appeal Procedures

At the end of spring semester each year, the academic records of all students who are receiving or applying for federal financial aid will be reviewed. Those students who fail to meet the Standards of Satisfactory Academic Progress will be sent a letter notifying them of their status by email. This letter will also outline steps students can take to maintain or restore their eligibility.

Can SAP affect me if I am a Transfer Student?

Yes. SAP can affect you as a Transfer Student. Credit hours accepted by CSU will be included in the maximum time frame towards completion of a degree.

What if I have not attended Central State for over one semester, will my past credits be considered towards SAP?

Yes, all prior credits are considered when determining SAP for students who return to CSU after one or more semesters of absence.

If I change my major, are those credits reviewed for SAP?

General education requirement credits will be considered in determining your SAP. However, for students who change

majors, credits attempted, and grades earned from a previous major do not count toward the new major and will not be included in the SAP determination.

***What grades are used when calculating and determining** SAP?*
ALL of them.

How does SAP apply to graduate students?
Graduate students must also meet standards of Satisfactory Academic Progress with the exception of a required 3.0 GPA.

SAP and Reinstatement of Aid
The Office of Financial Aid may approve a student's appeal based upon the academic plan developed by the academic advisor and the student. In this case, the student is not required to meet the SAP standards set forth in the policy, but instead must follow the academic plan.

Once a student fails to follow the academic plan provided by the academic advisor, the student must do the following in order to be eligible for financial aid: Complete a full-time equivalent term (12+ credits) with a 2.0 GPA without the use of federal funds. A student may complete multiple part-time terms with a 2.0 GPA to achieve the full-time equivalence in credit hours.

REGISTRATION IS NOT COMPLETE UNTIL CERTIFIED BY THE OFFICE OF THE BURSAR

All incomplete registrations must be cancelled by the student before the end of the 100% refund period to avoid charges for the semester. To be financially certified each semester, the following must apply:

1. All unpaid balances from a previous semester must be paid in full.
2. Students are required to have 100% of their current semester's bill (all charges) covered by any combination of the following:

- Cash, Money Order and Cashier's Check
- Visa, MasterCard or Discover
- Accepted financial aid in approved loans and grants, excluding Federal Work Study
- Documented Third Party Payer
- Be in good standing with a University approved payment plan.
-

Students who have not covered their full financial obligations may be subject to administrative withdrawal.

PAYMENT PLAN

As an option to assist families with covering direct cost incurred to attend Central State University, we offer a convenient monthly tuition payment plan. This plan allows two methods for making monthly payments. Payments can be made via automatic ACH withdraws from a checking or saving account or automatic payments from a Visa, MasterCard or Discover credit card. There is not a credit check, and no interest or finance charges apply on the unpaid balance. There is a $35.00 per semester non-refundable enrollment fee to participate in the payment plan.

RESIDENCE HALLS

In accordance with the Housing Contract, students living in the residence halls are committed to on-campus housing for the duration of the contract (one academic year). These fees are non-refundable. Due to the shorten length of the Summer term, the charges for Room and Board are adjusted. All students residing in the residence hall are required to pay a room reservation fee and a key deposit before receiving their room key. These deposits are not refundable.

REFUNDS

Students whose accounts have excess funds after all Central State charges are posted can expect that the excess of refundable funds will be sent to them. Students have the choice of delivery for their excess funds. The choices are ACH to a personal checking account or check. Please note that checks are mailed to the residence of record and cannot be picked up on campus. All students will need to register for a student account center account via the Student Portal upon enrollment into the university.

PAYMENT OF FEES

All fees due to the university can be paid at the Office of Cash Management, either in person, by mail or online at mycollegepaymentplan.com.

These fees can include but are not limited to:

1. New Student Fees
2. Tuition and Fees
3. Parking Permits and Citations
4. Graduation Application Fees
5. Housing Fees and Fines

CASH MANAGEMENT WITHDRAWAL REFUND POLICY

The Withdrawal Refund Policy below applies to **total** withdrawals only. Students who drop classes after the scheduled refund period will be charged in full for registered courses. Refunds for withdrawals will only be issued when all outstanding charges have been paid in full. The student's account will be reviewed for accuracy of charges before any refunds are issued.

After the 39th day of a full semester (Fall or Spring), no fees will be refunded (see academic calendar for withdrawal dates). If a student withdraws before the registration is complete, he/she is indebted to the University for the amount determined by the stated policies stated. Students withdrawn for disciplinary reasons during the semester forfeit any refund based on withdrawals. The refund policy does not apply to students who drop classes only and are still enrolled in the University. Students who fail to officially withdraw forfeit the refund of any fees.

One hundred percent (100%) refund of fees for withdrawals will be honored up and through the first day of the semester. Credit will be given to accounts of students whose **total** withdrawals are completed during the refund period.

WITHDRAWAL REFUND PERIODS

Fall through Spring
2nd through 10th day of the semester 90% 11th through 22nd day of the semester 50%
23rd through 39th day of the semester 25% 40th through the end of the semester
0%

Summer only
(see academic calendar)

OFFICE OF THE REGISTRAR

Michele Williams

University Registrar

The Office of the Registrar conducts the process of registering students in courses, maintaining official academic records and certifying students for graduation. This office is also responsible for calculating and recording the academic progress of students.

REGISTRATION PROCEDURE

Central State University is on the semester system. The academic year is divided into two semesters (fall and spring) and multiple summer sessions. Registration is open to all continuing students, in good academic standing according to the Academic Calendar available on CSU's web site.

Fees for students who register early are due prior to the start of the semester and are published on CSU's web site. During the open registration period, students must pay fees or prove their ability to pay. Late registration allows continuing students to register until the beginning of the semester with an additional cost per academic calendar.

All incomplete registrations must be cancelled by the student. Students must officially be registered for classes during the semester to be eligible to receive grades at the end of the semester. Students will not be retroactively registered once the semester has ended. If a student has reason to request an exception to this policy, the request must be submitted in writing to the Academic Standards Committee.

COURSE CREDIT-UNIT OF INSTRUCTION

Course credit is computed in terms of semester hours. The semester hour is the unit of instruction used in computing the amount of work required for graduation. One semester hour is equivalent to one fifty-minute period of lecture or recitation per week during the semester.

STUDY LOAD

The recommended study load is 15 to 18 semester hours. Written approval from the Department Chairperson and the College Dean is required if a student wishes to register for 19-21 semester hours during Fall and Spring Semesters. A student who enrolls in 22 or more semester hours will need to seek approval from the Department Chairperson, College Dean, and Provost and Vice President for Academic Affairs. The maximum study load for the Summer term is (11) hours.

This information includes credit taken for classes on campus through SOCHE Consortium cross registration, or as a transient student at another institution.

OVERLOAD

To register for courses beyond the normal study load (18 credit hours Fall and Spring/11 for Summer), you must receive permission from your advisor, department Chairperson, and Dean. An approved overload (up to 21 credit hours/up to 12 for Summer). Approval for more than 21 credit hours for fall or spring/12 for summer for graduating seniors may be granted by the Provost and Vice President for Academic Affairs.

FULL-TIME Student

A full-time student is one who enrolls for 12 or more credit hours per semester. Students registering for more than 18 credit hours per semester must obtain permission from their Department Chairperson, College Dean or University Provost.

PART-TIME Student
A part-time student is one who enrolls for 11 or fewer credit hours per semester.

STATUTE OF LIMITATIONS ON GRADE CHANGES

Grade changes, with the appropriate approvals, will be processed by the Office of the Registrar, up to two (2) years after the completion of a course. This policy does not apply to "I" grades.

GRADING AND GRADE POINTS

Students will not be retroactively registered once the semester has ended. If a student has reason to request an exception to this policy, the request must be submitted in writing to the Academic Standards Committee. At the close of each semester a letter grade indicating the quality of the student's work is reported by the instructor to the Office of the Registrar. Most departmental major courses require the student to earn a "C" grade or better for the course to satisfy graduation requirements. If a student receives a "D" or "F" grade in such a course, the student will be required to repeat the course. No course substitutions or waivers will be permitted to replace the course in which an unsatisfactory grade was received. The repeat attempt must take place at CSU. The student may not take a comparable course at another institution and transfer it back to CSU to satisfy the CSU requirement.

Points are assigned to each letter grade. The students are graded in accordance with the grading system. Grading standards are a faculty prerogative.

GRADING SYSTEM

Grade Point Letter Interpretation per Semester

Grade	Hour
A – Very High	4
B – High	3
C – Satisfactory	2
D – Low (poor work)	1
F – Failure	0
Z – Non-Attendance	0
FZ – Quit Attending/Did not officially Withdraw	
I – Incomplete	
P – Pass	
CR – Credit	
NC – No Credit	
AU – Audit	
IP – In Progress	
W – Withdraw	

CALCULATING THE GRADE POINT AVERAGE

The Grade Point Average can be obtained by multiplying the credit hours for each course by the points generated by each grade earned for the course. Next add the credit hours column being careful to exclude courses with grades that by policy do not calculate in the GPA. Then, add the points earned column. Finally, divide the points by the credit hours to obtain the GPA.

Calculating the Grade Point Average: Example

Course	Grade	Credit Hours	Grade Points	Quality Points

PSY 2000	B	5	3	15
BUS 1000	D	3	1	3
EDU 1330	A	2	4	8
GEL 1010	C	4	2	8
Total		14		34

Grade Point Average (34 divided by 14) = 2.42

STUDENT CLASSIFICATION

- Freshman: A student who has earned 29 credit hours or fewer.
- Sophomore: A student who has earned between 30 and 59 credit hours.
- Junior: A student who has earned between 60 and 89 credit hours.
- Senior: A student who has earned 90 or more credit hours.

ATTENDANCE POLICY

Attendance is a critical element in being a successful student. It is expected that students will attend all classes. The instructor of record is responsible for monitoring attendance and will include an attendance policy in the course syllabus.

Failure to attend class can affect a student's overall grade in a course and **may affect his or her financial aid status**.

Faculty members as representatives of their individual programs may maintain specific attendance requirements for their respective courses. Each faculty member within their program will determine the percent of the final course grade contributed by the attendance grade. Students are responsible for knowing and adhering to these policies.

The university recognizes that school-sponsored activities are part of the education process and that such an activity may conflict with a scheduled class. These situations require discussion among the teacher, student, and supervisor of the activity, so that all parties understand the effects of not attending the class. Students who are absent because of university business MUST personally notify faculty of impending absences and discuss class work. Athletes who are absent from two consecutive classes must be reported immediately to the Athletic Compliance office (937-376-6295) for student intervention by the athletic department.

Excused Absences

Excused absences are under the final discretion of the instructor of record. Excused absences may include:

- documented military service,
- documented jury duty,
- documented university service, university sponsored field trip, or off-campus representation of the University.
- documented illness
- documented serious illness or death in the student's immediate family
- documented court appearance.

Students without a 2.0 cumulative GPA or better are ineligible for excused absences due to university sponsored programs or travel. Students who miss class for any reason are responsible for all missed exams, homework, and assignments.

ACADEMIC STANDING, PROBATION AND SUSPENSION – Effective Fall 2024

Academic Standing Policy

Central State University students are expected to actively pursue their coursework and maintain persistence in fulfilling degree requirements within a reasonable time frame. Students are expected to meet the standards for good academic standing each semester. A student's academic standing is indicated on his/her transcript.

Good Academic Standing

A minimum cumulative grade point average of 2.0 is required for good academic standing and for the completion of an undergraduate degree at Central State University; however, some programs may require a higher-grade point average. A student who does not maintain a cumulative grade point average of 2.0 will be placed on probation and/or suspended.

Academic Probation

Academic probation is initiated when a student, regardless of their classification, fails to attain a cumulative grade point average of 2.0. A student will be placed on academic probation during their next semester of attendance (excluding summer) if they fail to attain the minimum cumulative grade point average of 2.0 at the conclusion of a semester. While on academic probation, a student is permitted to return to the University. The student is expected to achieve a semester grade point average of 2.0 or higher. While on academic probation a student is prohibited from enrolling in more than 14 credits per semester (excluding summer). A student continues on probation until they attain a cumulative grade point average of 2.0 or higher.

Academic Suspension

Academic suspension occurs whenever the semester grade point average of a student who is on academic probation falls below 2.0 during subsequent semesters, and if the cumulative grade point average is below 2.0 he/she will be placed on academic suspension.

A student who has been suspended for the first time is eligible to apply for readmission after one semester (fall or spring) through the University's appeal for readmission process. A student who has been suspended for a second time is eligible to apply for readmission after absence from the university for one academic year (excluding summer term). A student who has been suspended for a third time will be dismissed from the university.

Readmission after an academic suspension is not automatic and can be denied upon the recommendation of the Academic Standards Committee. A student whose petition for readmission is approved will be readmitted and designated as "Continued on Probation." To avoid a second or third academic suspension, the student must achieve a minimum semester grade point average of 2.0.

APPEAL FOR RETURN AFTER BEING ACADEMICALLY SUSPENDED

A student who seeks to return after being academically suspended must submit a petition (available from the Registrar's Office) to the Academic Standards Committee. Appeals must include an Academic Success Plan signed by the student and an academic advisor, student success coach, or chair of the student's program of study. If the student is approved to return, evidence must be shown of following the agreed-upon Academic Success plan. Failure to do so will be considered in the review of any future appeals for return.

Appeals must be filed with your Academic Advisor at least 60 days prior to the beginning of the academic semester for which one is seeking to return. The Committee must receive from the advisor, your Appeal at least 45 days prior to the beginning of the semester in which the student wish to re-enroll.

The Committee will take into consideration hours and grades earned at another accredited institution during the period of academic suspension from Central State. If the student is approved to return, credit hours earned at another institution will be accepted and posted to the student's transcript in accordance with rules on the application of all transfer credit in effect at the time of the student's return

Students who are approved to return from academic suspension will be placed on academic probation and must achieve at least a 2.0 semester grade point average, or they will be academically suspended again

Readmission after one or two “Academic Suspensions” is not automatic and may be denied upon the recommendation of the Academic Standards Committee.

While the Academic Standards Committee will consider petitions for return after three or more academic suspensions, such petitions will be approved only under the most exceptional circumstances. Students with multiple academic suspensions are advised to pursue their education at another institution or to consider a career path that does not require an undergraduate degree.

NOTE: Student with below 30 credit hours or less are required to register for courses with the Office of Academic Coaching and Advising to complete an academic success plan.

NOTE: The appeal process for Financial Aid reinstatement is different. Please contact the office of Financial Aid for specific instructions

NOTE: A student who has been suspended for a third time will be dismissed from university.

Grade Appeal Policy

The student has a right to the grade he or she has earned, the right to know the grading system of the instructor, and the right to know grades as they are given during the semester. The grading system should be included in the course syllabus.

The decision to change a student’s grade shall only be made by the instructor of record unless the instructor is incapacitated, cannot be contacted, or if there is evidence of prejudicial or capricious grading.

If the student has evidence of prejudicial or capricious grading, the student should first consult the instructor. If this consultation does not resolve the conflict, the student should then consult the department chairperson. If the student, after consultation with the chairperson, wishes to pursue the appeal, the chairperson will inform the dean that a hearing has been requested.

The student has the right to submit a Grade Appeal Form to the department chairperson up to 30 days after the beginning of the subsequent semester, excluding summers. Until the grade is finally determined, the student’s academic standing and all related rights and privileges are based on the grade as originally assigned. The student shall collect and present any evidence (tests, papers, laboratory reports, case studies, etc.) to the Appeals Committee. The burden of proof and responsibility for evidence collection remains with the student

1. The dean will appoint a committee composed of three tenured faculty members from within the discipline, who, if possible, should be familiar with the course. If there are not three tenured faculty members within the discipline, the dean will appoint other tenured faculty members from the department and/or college as needed.
2. The student and instructor are to be apprised of the composition of the committee. The dean should honor any reasonable objection that either person might have to the appointment of committee members.
3. The burden of proof will be on the student. No additional work may be submitted for consideration; only the original work used in calculating the grade will be used in deciding if the appeal should be heard.
4. The Appeals Committee will review evidence to decide if a hearing is warranted due to prejudicial or capricious grading. The committee will notify the student, faculty member, and department chair of their decision within 30 days after receiving the grade change appeal.
5. Both the student and the instructor have the right to present their position in person to the committee.

The decision of the committee is final, and the grade it decides upon becomes the official grade for the course. Unless the instructor is incapacitated or cannot be contacted, no change of grade will be made without the instructor of record being informed in writing.

TRANSFER APPLICATION

An applicant who was enrolled in another college or university for at least one course is classified as a transfer applicant. Official transcripts (sealed envelope with the raised seal on the document) from all other institutions attended must be submitted to the Office of Admissions as part of the Central State University Application. Failure to list attendance at a college or university on the admissions application may be grounds for revocation of admission or dismissal from the university.

The Office of the Registrar will evaluate overall transfer credit for acceptance by the University. The Department Chair of the department you are seeking entrance into will evaluate credits for their applicability to program and degree requirements. The evaluation of transfer credits and how they apply to degree requirements will take place within the first 30 days of your matriculation at Central State University. Students can view their transfer credits on their unofficial transcript provided through their Student Portal.

ADVANCE STANDING

For advance standing to be granted, institutions you have attended must be accredited by one of six national accrediting agencies:

- Middle States Association of Colleges and Schools
- North Central Association of Colleges and Schools
- New England Association of Schools and Colleges
- Southern Association of Colleges and Schools
- Western Association of Schools and Colleges

You can check the accreditation of your institution online at www.chea.org. The acceptance of transfer credits from any other institution must be approved by the Office of the Registrar.

Central State University operates on a semester academic calendar. One semester credit equals 1.5 quarter credits. For example, if you transfer 15 quarter credits, that will be the equivalent of 10 semester credits.

Central State University will accept Advanced Placement Credit Program credits (AP) and College Level Examination Program credits (CLEP) under the auspices of the College Board. To receive AP credit a high school student must have completed an official AP course and taken the test in that subject. Credit is granted for test scores of 3, 4, or 5. CLEP examinations cover material taught in the first two years of college. Students earning satisfactory scores in the CLEP examination will be granted the same amount of credit granted to students who successfully complete the course.

Credit is also accepted from the Defense Activity for Nontraditional Education Support (DANTES). Central State University awards transfer credit for Military Experience based upon the American Council on Education's Guide to the Evaluation of Educational Experiences in the Armed Services.

Applicants interested in receiving consideration for any of these alternative forms of credit must have the official score report sent directly to the Office of the Registrar, where official granting of credit begins. CSU will award credit for International Baccalaureate (IB) Program "High Level" exams passed with a score of five (5) or higher.

You may transfer credits from another institution; however, you are still required to earn a minimum of 24 semester hours at CSU. Your Department Chair may require you to take specific courses at Central State University to earn your degree. Information will be shared at the time you receive your official check sheet.

College-Level Examination Program (CLEP) Aligned Courses/Credit

Last Updated: April 23, 2019

CLEP Exam Area	CLEP Score	Course ID	Course Title	Semester Credit Hours
American Government	63 and Above	PSC 1100	American National Government	3
	56-62	OTM Social Sciences	OTM Social Sciences Credit	3
Biology	50and Above	OTM Natural Sciences without Labs	OTM Natural Sciences Credit without Labs	3
French Language	63and Above	ILC 2241, Foreign Language Elective	Advanced French, Foreign Language Elective	4+
	62	ILC 1142	Basic French II	4+
	56	ILC 1141	Basic French I	4+
History of the United States I	61and Above	HIS 2201	History of the U.S. To 1877	3
History of the United States II	57and Above	HIS 2202	History of the U.S. Since 1877	3
Introductory Psychology	59and Above	PSY 1200	Introduction to Psychology	3
Introductory Sociology	56and Above	SOC 1105	Introduction to Sociology	3
Principles of Macroeconomics	56and Above	ECO 2220	Principles of Macroeconomics	3
Principles of Microeconomics	57and Above	ECO 2210	Principles of Microeconomics	3
Spanish Language	63 and Above	ILC 2231, Foreign Language Elective	Advanced Spanish, Foreign Language Elective	4+
	62	ILC 1132	Basic Spanish II	4+
	56	ILC 1131	Basic Spanish I	4+
Western Civilization I	55and Above	OTM Arts and Humanities	OTM Arts and Humanities Credit	3
Western Civilization II	54and Above	OTM Arts and Humanities	OTM Arts and Humanities Credit	3
College Mathematics	57and Above	MTH 1550	Modern Applications of Mathematics	3
College Algebra	63and Above	MTH 1750	College Algebra	3
Introductory Business Law	57	BUS 2200	Legal Environment of Business	3
English Literature	63			
College Mathematics	63	MTH 1550	Modern Applications of Mathematics	3
Chemistry	66			

TRANSFER CREDIT POLICY

Effective Term Spring 2023

Central State University will evaluate and award transfer credit from post-secondary institutions holding accreditation from any of the regional accrediting associations recognized by the Council for Higher Education Accreditation (CHEA). College-level coursework completed at institutions that are non-regionally accredited are not eligible for transfer credit.

Any student applying for admission to Central State University must have transcripts sent to the Office of Admission. The registrar will review transcripts, determine the applicability of transfer credits, and notify the student when the process is complete. Transfer credit hour values are awarded based on the credit hour value assigned by the originating institution, and any conversion to semester credit hours will be completed before transfer credit is awarded.

For all undergraduate courses taken before autumn 2005, students must have earned a grade equivalent to a ‘C-’ or higher for courses to be eligible for transfer credit. For all undergraduate courses taken in autumn 2005 or later, students must have earned a grade equivalent to a ‘D’ or higher for courses to be eligible for transfer credit. Courses transferred in with a ‘D’ grade may not satisfy program requirements. Undergraduate courses that have been awarded a non-standard passing grade (P/Pass; S/Satisfactory) are eligible for transfer credit.

Central State University will accept Advanced Place Credit Program credits (AP) and College Level Examination Program credits (CLEP) under the auspices of the College Board. To receive transfer credit for AP courses, a high school student must have completed an official AP course and taken the test in that subject. Credit is granted for test scores of 3, 4, or 5. Students earning satisfactory scores in the CLEP examination will be granted the same amount of credit granted to students who successfully complete the course. See the CLEP Aligned Courses/Credit chart for exam and course equivalencies and required CLEP score required for transfer credit.

Students enrolled in a four-year undergraduate degree program may be awarded a maximum of 90 transfer credit hours. Students enrolled in a one-year certificate, or a one-year technical certificate may be awarded transfer credit for up to 20 percent of the credits required for the certificate. Students enrolled in a short-term certificate, or a short-term technical certificate are not eligible for transfer credit.

Courses older than twenty years from the current academic year will not be eligible for transfer credit. Courses that are deemed remedial or developmental are not eligible for transfer credit.

TRANSFER CREDIT APPEAL PROCESS

If a student wishes to challenge a decision of the registrar, an appeal must be submitted in writing to the associate registrar or designee. The associate registrar, or designee, will review the appeal to determine if the Transfer Credit Policy was appropriately applied. If the policy was misapplied, a correction would be issued. If the policy was applied correctly, the appeal would be provided to the appropriate Department Chair, Dean, or designee for review. Once a final decision has been made, it will be provided to the student by the associate registrar.

INCOMPLETE

A grade of incomplete "I" is a temporary grade assigned to students who lack final assignments or projects, or who, for some other extenuating circumstance, were unable to complete the requirements of the course within the semester. This grade is assigned by the instructor with the consent of the student, and the mutual understanding of the conditions under which this grade may be changed. The incomplete grade requires the signature of the instructor and the student with a brief description of the requirements necessary to receive a grade.

Both the student and the instructor understand that if the additional coursework is not satisfactorily completed and submitted to the instructor within six (6) weeks after the beginning of the next semester of enrollment (up to one year), the grade will change to an "F". The instructor has (2) days after the stated deadline to process the paperwork and to submit the Change of Grade Report to the Office of the Registrar. Once an "I" grade has been changed to an "F" grade, no further change is permitted.

Individual exceptions to this policy, due to extenuating circumstances, will be considered by the Academic Standards Committee upon receipt of a formal appeal presented to the Committee by the student's Academic Advisor or Department Chair".

REPEATING A COURSE

Students may repeat most courses in which a low or failing grade (D, NC, or F) was earned. All course repeat attempts will be recorded on the student's academic record. The first grade earned will be excluded from the calculation of the cumulative grade point average by the last repeat attempt. Students are advised to check with the Office of Financial Aid to determine the effect of repeated courses on their financial aid awards. Courses completed at CSU cannot be repeated at another institution.

AUDITING COURSES

Students are permitted to audit courses but will receive neither grades nor credit for those courses. The student who audits is expected to attend class but is not required to submit assignments or take examinations unless contractually agreed. The fees for auditing are the same as those for enrolling for credit. Changing from audit to credit or from credit to audit is not permitted once the registration is complete.

SOCHE - STUDENT CROSS-REGISTRATION PROGRAM

Cross-Registration is a program of the Southwestern Ohio Council for Higher Education (SOCHE) to allow students who are degree-seeking and/or participating in certification programs access to academic opportunities not available at their own institutions. Students attending colleges and universities within SOCHE may register for courses that are applicable to their degree program offered by other SOCHE institutions.

Generally, all classes, including those offered through distance education, are open, subject to space availability and completion of prerequisites and with permission of the host institution. Courses categorized as workshops are not available for cross-registration.

To cross-register for a course at another SOCHE institution, the desired course(s) must not be offered at the student's home institution during the term in which the student desires to enroll. Students must adhere to the cross-registration guidelines established at each SOCHE-member institution.

POST BACCALAUREATE ROUTE

Central State University offers a post-baccalaureate route and is designed for individuals who have completed the baccalaureate degree from an approved accredited institution with a minimum cumulative grade point average of 2.00

or 2.75 for prospective students who wish to obtain an initial teaching license. Individuals interested in seeking admission to Post Baccalaureate status should consult the University Office of Admissions or the appropriate College of Education Department.

POST BACCALAUREATE ROUTE

Central State University offers a post-baccalaureate route and is designed for individuals who have completed the baccalaureate degree from an approved accredited institution with a minimum cumulative grade point average of 2.00 or 2.75 for prospective students who wish to obtain an initial teaching license. Individuals interested in seeking admission to Post Baccalaureate status should consult the University Office of Admissions or the appropriate College of Education Department.

SENIOR CITIZEN ENROLLMENT

Senior citizens who are Ohio residents may enroll in classes at Central State University free of charge for "audit" status only. Such enrollment is made on a space available basis during the Late Registration period only. Senior citizens enrolling in classes are responsible for meeting limited course prerequisites and for the payment of any special course fees which may apply. Proper identification is required (Golden Buckeye card or verification of age 60).

DROP/ADD COURSES

Please see the academic calendar for exact dates per semester and term.

TOTAL WITHDRAWAL FROM THE UNIVERSITY

Students withdrawing from the university must complete a withdrawal form. Total withdrawal ends each semester at a date that is designated on the academic calendar. Students who stop attending classes without officially withdrawing will receive failing grades. Students who stop attending classes are also subject to administrative total withdrawal with or without record from the University.

DECLARING A MAJOR

All new undergraduate students are assigned to an academic advisor within the University College for advising. It is expected that a major be declared after the second semester of enrollment. A Declaration of Major form must be completed and filed in the Registrar's Office no later than the sophomore year. Students must fulfill Academic Department requirements prior to declaring a major.

MAJORS AND MINORS

A student must declare a major in the department of choice by the sophomore year. The major may be changed at any time during the student's academic career, however, the student should finalize a major no later than the beginning of the junior year, since certain General Education courses are required in specific disciplines. Students seeking an Ohio Teaching License should confer with the Dean of the College of Education.

DOUBLE MAJORS

A student who plans to pursue more than one major notifies the Office of the Registrar of such an intention and completes major requirements for both programs, the General Education requirements being common to both. The student should note, however, that the special requirements for the Bachelor of Arts and Bachelor of Science degrees differ. The student combining two such majors must satisfy both sets of special requirements. (See GRADUATION REQUIREMENTS — SPECIAL REQUIREMENTS) The transcript will reflect both majors. Such a student has two academic advisors to assist in coordinating the programs, but it is the responsibility of the student to notify the Office of the Registrar at the time the decision is made to pursue two majors.

GRADUATION

Prospective graduates are required to file an application for graduation with the Office of the Registrar and pay the application fee during the application period as outlined in the Academic Calendar. The application fee is nonrefundable and non-transferable. Students must fulfill all academic (including Final Exams) and financial requirements to participate in Commencement exercises. Prospective graduates are also required to earn their last 24 semester hours at CSU.

The academic advisor, the department chairperson, and the dean will verify that degree requirements have been satisfactorily completed for graduation. Course substitutions or waivers must be submitted on a Substitution/Waiver Form and must be approved by the academic advisor, department chairperson and the dean. The Registrar will certify that all graduation requirements have been satisfied after receipt and review of the student's final grades. Any student wanting to take any of their last 24 credit hours at another institution must complete an academic appeal for consideration.

SOCHE students must adhere to the cross-registration guidelines established at each SOCHE-member 42 institution, which may hinder participation in commencement.

APPLICATIONS FOR GRADUATION

Applications for Graduation are accepted at the beginning of the academic year preceding the student's anticipated graduation date. An application fee is required (this fee can be charged to your account). The application fee is non-refundable and non-transferable. All commencement regalia are available for purchase at Senior Salute or Barnes & Noble Book Store.

Applications are valid only for the academic year in which they are submitted. The following steps and minimum requirements must be satisfied for a student to be considered as an applicant for graduation:

1. Meet with advisor to confirm when you will be finishing your requirements. Requests that your official check sheet to be reviewed and emailed to graduation@centralstate.edu. Any substitution forms that have not been processed should be submitted at this time.
2. A degree audit will be conducted on a first come first served basis, but it will likely be completed within 15-20

business days.

3. Complete a graduation application through the student portal under Student Records.
4. A degree audit will be sent to the academic advisor for verification.
5. Upon resolution of the degree audit, a final copy and next steps will be sent to both the student and academic advisor.
6. It is required that all graduates pay the applicable graduation fee.
7. A minimum cumulative grade point average is required for graduation. The actual requirement varies by degree earned and by major program of study and will always be a 2.00 GPA or better. Students must check with their college and major department to determine their GPA requirements.
8. All outstanding financial obligations owed to the University must be cleared by the date published on the Graduation Application. Graduation Applications for candidates who do not complete their requirements as planned, are retained by the Registrar for one (1) academic year. Students in this group who wish to re-apply for graduation for a subsequent semester may do so by submitting a letter of intent accompanied by the appropriate application fee. Students who have not submitted an Application for Graduation within the last year must complete a new Application and pay the appropriate fee.

CATALOG FOR GRADUATION

Students have a total of eight calendar years in which to complete the degree requirements for graduation. Students who take longer than eight years from the date of initial enrollment to graduate will be subject to degree requirements of the current catalog.

RELEASE OF RECORDS/TRANSCRIPTS

The Family Educational Rights and Privacy Act of 1974, as amended, governs the maintenance and release of records/transcripts. A copy of these regulations is available in the Office of the Registrar.

All students have a right to access their academic transcript for the purpose of seeking employment. Central State University does not withhold transcripts due to outstanding institutional debt.

Central State university has partnered with Parchment to offer a secure method of requesting and receiving official academic transcripts electronically or by U.S. mail. Transcripts can be ordered online 24/7 via the Parchment website. The request will be processed within one to three business days, excluding weekends and holidays. However, additional processing days may be necessary during peak periods, which are usually the beginning and end of each term. A slight delay in processing may be experienced for alumni who attended prior to 1989.

Fee information is available on the Parchment website and is subject to change without notice. All orders require payment with a credit or debit card and charges are non-refundable.

RESIDENCY

An Out-of-State student who feels that he/she qualifies as an In-State resident must complete a request to change residency status form and submit it to the Office of the Registrar. Supporting documentation and verification is required.

In-state residency approval is neither retroactive nor automatic. All requests for residency changes, with supporting documentation, must be submitted to the Office of the Registrar no later than one month prior to the beginning of the semester for which the residency change is requested.

Out-of-State students who graduated from an Ohio high school may be eligible for Forever Buckeye Residency status. Contact the Office of the Registrar for more information.

RECOGNITION OF ACADEMIC ACHIEVEMENT DEAN'S LIST

The Dean's List is compiled at the close of each semester and includes the names of all students who have a semester grade point average of at least 3.2 with a minimum load of 12 G.P.A. hours for the academic period.

ACADEMIC RECOGNITION CONVOCATION

An Academic Recognition Convocation is held each Spring Semester to recognize honor full-time students* who have attained high scholastic standing, as follows:

- Summa Cum Laude | 3.90 or higher GPA for all work completed.
- Magna Cum Laude | 3.75 to 3.89 GPA for all work completed.
- Cum Laude | 3.60 to 3.74 GPA for all work completed
- Gold Cord Honors to graduating seniors with cumulative grade point averages of 3.50 or above who have no "D", "F", "FZ" or "Z" grades or repeated courses.
- Class Scholars are students with cumulative grade point averages of 3.20 to 3.49.
- College Scholars are students with cumulative grade point averages of 3.50 or above.
- Gold Cord Honors to graduating seniors with cumulative grade point averages of 3.50 or above who have no "D", "F", "FZ" or "Z" grades or repeated courses.

Transfer students are eligible for recognition Honors if they have earned at least 24 semester hours at CSU, and they meet the same criteria required of CSU students. Freshman students who took classes during their enrollment in High School are NOT considered transfer students.

NOTE: "W" grades will not be considered in determining full-time status for academic recognition.

- Freshman recognitions are awarded to students with 12 to 30 quality hours earned.
- Sophomore recognitions are awarded to students with 31 to 60 quality hours earned.
- Junior recognitions are awarded to students with 61 to 90 quality hours earned.
- Senior recognitions are awarded to students with 91 or more quality hours earned.

Outstanding Senior Scholars also are recognized at the Annual Academic Recognition Convocation.

ACADEMIC DISTINCTION

All CSU students are eligible to graduate with an Academic Distinction. Honors awarded to graduating seniors at commencement are as follows:

- Summa Cum Laude | 3.90 or higher GPA for all work completed.
- Magna Cum Laude | 3.75 to 3.89 GPA for all work completed.
- Cum Laude | 3.60 to 3.74 GPA for all work completed
- Gold Cord Honors to graduating seniors with cumulative grade point averages of 3.50 or above

VETERANS' AFFAIRS

The Veterans' Affairs Office, located in the Office of the Registrar, provides assistance and registration information for veteran students. Persons with questions related to Veterans Administration benefits, registration and study at the University should contact the office. Students eligible for veterans' benefits can visit the University website for updates on benefits, Veterans Education Services (VES).

Veterans are afforded the same privileges and assume the same obligations as other students at Central State

University. They should apply online or (www.va.gov) or to the nearest Veterans Administration office for a certificate of eligibility. This certificate of eligibility for training must be presented at the time of registration to the certifying official.

Students receiving Veterans Benefits must abide by all regulations in the Federal Benefits for Veterans and Dependents 1-S-1 Fact Sheet. (See also under REGISTRATION.)

VETERANS' REGULATIONS/CONDUCT POLICY

All students receiving federal benefits for veterans and dependents are obligated to follow regulations of the Federal Benefits Program and those of the University. The Registrar is the certifying officer. The following University regulations are applied:

1. All veterans are required to submit a copy of their DD 214.
2. All veterans are required to submit a copy of their COE (Certificate of Eligibility).
3. All veterans must be certified each semester. It will be the veteran's responsibility to notify the certifying officer in the Office of the Registrar of any changes in the Semester Class Schedule.
4. Veterans Affairs will not pay for courses outside of a student's academic requirement.
5. All veterans are responsible for notifying the certifying officer of any repeated courses.
6. All veterans are required to alert the Office of the Registrar when adding a course, dropping a course, or withdrawing from the University.
7. Any veteran receiving incomplete grades ("I") during any semester must remove those incompletes by the last day of the sixth week of the following semester enrolled (See also under FINANCIAL AID AND THE ACADEMIC PROGRAM-GRADING).
8. All veterans are responsible for notifying the certifying officer of any transfer work.
9. Veterans' benefits will be discontinued for any veteran student who has been required to withdraw. Recipients of Title IV and/or Veterans' Educational Benefits will be required to complete successfully a minimum of 12 credit hours per semester. A Title IV student who must repeat a course that was originally paid for with Title IV monies will be required to pay for the repeat course with the student's own funds.
10. Students receiving VA benefits who repeat a course three or more times may incur a debt with Veterans Affairs.

SELECTIVE SERVICE REGISTRATION

All male Ohio resident students' ages 18 through 25 must register with the Selective Service to qualify for In State fees. To register log on to: www.sss.gov. The Out of-State Surcharge will be assessed to those students not registered with Selective Service at the time of registration.

POLICY ON PROCTORING

The proctoring policy applies to all face-to-face and online instructional delivery platforms and teaching modalities for which online examinations for midterm and final examinations are to be conducted using the CSU learning management systems. Authentic assessments such as case studies, group projects, presentations, interviews, portfolios, and journals do not require proctoring, nor do open-book exams. In implementing the proctoring policy, the academic freedom and rights of the CSU faculty, as articulated in the current CSU AAUP collective bargaining agreement, are preserved. The creation of this proctoring policy preserves the privacy of students. Faculty concerns, informed by legal guidance, are brought into alignment through the AAUP-CSU contract. For midterm and final examinations, the proctor will ensure the security and integrity of the examination process. In keeping with best practices and industry standards, 'Respondus Monitor,' 'Respondus LockDown Browser,' and 'SmarterProctoring' are the proctoring software utilized by CSU. Students are required to submit CSU Marauder ID cards and state-issued ID cards at the time of proctoring.

Faculty will clarify student rights, responsibilities, and test-taking decorum for each enrolled CSU student at the start of the online or face-to-face course, which requires proctoring. Proctoring either for higher education or certifications or for licensure purposes would conform to best practice requirements, evidenced by documentation and verification procedures. The benefits would be clarified for the student of conformance to test-taking standards, as a segue to promoting institutional image, affirming the quality of the evaluation system, achievement of institutional accreditation approval, prevention of grade inflation, and maintenance of high academic standards. The overriding intent in proctoring is to promote and ensure test-taking conformance to established standards of ethical behavior rather than detection and discipline; essentially, the avenues for the practice of misconduct prevention rather than curation would be pursued as an overriding intent.

Faculty will discuss the proctoring requirements during the first week of the course and will include a proctoring statement with ample guidance for the student in the course syllabus, which is a nominal requirement and does not warrant additional compensation for the faculty. Central State Global will provide faculty and students with regular training on proctoring platforms through the agency of the Center for Instructional Technology and Innovation (CITI). Students who decide not to use the university's proctoring platforms, which require scanning the testing environment of the students, will be required to complete the online Proctor Approval Form, evidenced by their electronic signature, and submit the document to the course instructor for pre-approval; in such a case, students will be responsible for proctoring fees, if any.

ACADEMIC AFFAIRS

Dr. Amy Hobbs Harris
Interim Provost and Vice-President for Academic Affairs

THE ACADEMIC PROGRAM GENERAL OBJECTIVES

The Central State University education strives to empower its students with

- **insight** formed by the liberal arts,
- **motivation** to solve problems through science and technology,
- **competence** to achieve economic self-sufficiency,
- **disposition** encouraging service and lifelong education,
- **values** promoting personal and community health,
- **understanding** of one's own and other cultures, and
- **responsiveness** to major problems confronting humankind.

DEGREES

Central State University offers the following baccalaureate degrees: Bachelor of Arts, Bachelor of Music, Bachelor of Music Education, Bachelor of Science, Bachelor of Science in Education, and Bachelor of Science in Manufacturing Engineering and the Master of Business Administration (MBA).

Undergraduate degree requirements:

1. A minimum of 120 semester hours, depending on the major and year of matriculation, as follows:
    a. The General Education Requirements.
    b. Special Requirements for the baccalaureate degrees (See below)
    c. Requirements for a major or minor concentration of courses (in general, a minimum of 30 hours for a major, 18 hours for a minor. See under individual department or program)
    d. Additional electives as needed to complete the minimum 120 hours.
2. A minimum cumulative grade-point average of 2.0 (varies by major)
3. Filling an application for graduation with the Office of the Registrar
4. At least 24 final semester hours in residence at Central State University

The student is expected to fulfill the graduation requirements in the catalog of matriculation or a subsequent one, but not from both. In the case of discontinued or replacement courses, the academic advisor will assist in making any adjustment.

Under rare circumstances, the University may choose to award a degree posthumously. To be considered for such an award, the student must have been in good academic standing with the University at the time of death and must have completed a minimum of 104 semester hours. Further, the student must have exhibited qualities of scholarship and community membership that warrant special consideration. When these conditions are met, a departmental recommendation will go to the Provost and Vice President for Academic Affairs, the President, and the Board of Trustees for final approval.

SPECIAL REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE

1. A grade point average of at least 2.2 in the major concentration
2. Presentation of no more than 40 semester hours in any one discipline toward the minimum **120** hours

Humanities Requirements

1. Completion of at least six (6) semester hours of humanities in addition to the GENERAL EDUCATION REQUIREMENT in humanities
2. The additional humanities hours are to be selected from two of the following disciplines: art, drama, history, linguistics, literature, music, philosophy, religion, speech, and international languages (beyond the first year of the course).

SPECIAL REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE

1. A grade-point average of at least 2.0 in the major concentration.
2. Except when required to meet accreditation or other professional standards, presentation of no more than 50 semester hours in any one discipline toward the 120-148 hours.
3. The sciences and the more technical subject-matter areas must receive concentration and emphasis.

SPECIAL REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN EDUCATION DEGREE

1. A cumulative grade-point average of at least 2.5.
2. A grade point average of at least 2.7 in the major teaching field.
3. A grade of "C" or above in each required professional education course.
4. Completion of at least 60 semester hours in courses numbered 2000 and above.
5. Except when required to meet licensure or other professional standards, presentation of no more than 47 semester hours in any one discipline toward the 120-148 hours.
6. Eligibility for Ohio Licensure requires personal fitness, specific prerequisites, and laboratory and field experiences.

GENERAL EDUCATION CURRICULUM

Central State University provides students with a strong liberal arts education that prepares them with 21st century knowledge and skills both to be successful in their careers and to become life-long learners. As an 1890 land-grant institution, Central State's mission is to prepare students with diverse backgrounds for success in their lives and careers. The University's required general education curriculum, the Marauder Lifestyle and Marauder Foundation, reflects this commitment.

The Marauder Lifestyle

CSU's Marauder Lifestyle helps students adjust to college while preparing for life and careers. The Marauder Lifestyle prepares students to enact the University's tenets through courses that address physical well-being, academic and social adjustment, use of information technology, personal responsibility and fiscal awareness, and psychological health. Through their Marauder Lifestyle courses, CSU students understand what it means to be a CSU Marauder and learn how their personal health and lifestyle choices affect them and society.

The Marauder Lifestyle is guided by CSU's Cornerstone for Wellness and Lifestyle Choices. This Cornerstone assures students:

- Apply effective strategies to promote and maintain physical and mental health, academic and social adjustment, and economic and information literacy.

The Marauder Foundation

The Marauder Foundation develops a breadth of skills, perspectives, and experiences across a wide range of disciplines to meet the educational needs of our diverse student population. Marauder Foundation classes complement students' professional programs by blending practical application of knowledge in a discipline with tools for life-long learning.

Therefore, through the Marauder Foundation, CSU students are empowered to apply their knowledge to real-world situations and adapt to change.

The Marauder Foundation is guided by CSU's Cornerstones of Academic Success. These Cornerstones assure students:

- Communicate effectively in both written and oral situations.
- Think critically and apply the habits of inquiry and analysis to various situations.
- Demonstrate an awareness of the roles cultural and social factors play in human achievement, especially for people of African and African American heritage.
- Apply quantitative and scientific reasoning to understanding human experience and the natural world.

These Cornerstones reflect areas of knowledge and methods of inquiry recognized by our scholarly community as necessary to investigate the social, cultural, scientific, and technological complexities of our 21st century society. These Cornerstones are central to all courses in the Marauder Foundation curriculum and are distributed among the following areas: English composition, mathematics, humanities and the arts, history, social and behavioral sciences, and natural and physical sciences. Each Cornerstone includes core courses required of all students. Students choose additional classes to complete their general education requirements from a list of approved Bridge courses in consultation with their academic advisor. The Marauder Foundation satisfies the Ohio Board of Regents' transfer module requirements and, along with the degree program, provides students the opportunity to tailor their university degree to their unique interests and academic needs.

GENERAL EDUCATION REQUIREMENTS

The Marauder Lifestyle
(3 credits)

The Marauder Lifestyle curriculum focuses on CSU's Wellness and Lifestyle Choices Cornerstone. This curriculum is required of all CSU students and provides strategies that encourage lifelong habits to promote learning and maintain personal well-being.

Requirement	Cornerstone
Undergraduate Success Seminar (USS 1000, 2 credit)	Wellness and Lifestyle Choices
Physical Activity (1 credit from List A)	Wellness and Lifestyle Choices

The Marauder Foundation

The Marauder Foundation curriculum is required of all CSU students and is defined by CSU's four Cornerstones of Academic Success: effective communication, critical thinking, understanding and appreciation of diversity in social and cultural values, and understanding and application of quantitative reasoning and the scientific process. These Cornerstones are distributed among the following areas: English composition, mathematics, humanities and the arts, history, social and behavioral sciences, and natural and physical sciences. For each Cornerstone, students' progress from a Core course through Bridge courses. The Cornerstones continue to be developed across academic majors. Mastery of the Cornerstones is demonstrated in a designated senior-level capstone experience. Students must complete a minimum of 36 credits from the combined Core and Bridge requirements. **Core Courses (10-11 credits)**

(At least <u>one</u> Core course for <u>each</u> Cornerstone must be completed before enrolling in Bridge courses in same Cornerstone unless exempted by major.)

Requirement	Cornerstone

ENG 1100 or ENG 1101 (Based on placement results, 4-5 credits, "C" or better required)	Effective Communication, Critical Thinking
MTH 1750, MTH 1550 or STEM math option (3 credits)	Quantitative & Scientific Reasoning, Critical Thinking
One course from: HIS 1110, HIS 1121, HIS 1122, PSY 1200 or SOC 1105 (3 credits)*	Awareness of Role of Social & Cultural Values, Critical Thinking

STEM Math Options: Students majoring in STEM disciplines who achieve acceptable placement scores may satisfy the general education math requirement by taking one of the following courses: Math 2001, Math 2500, Math 2501, Math 2502, or Math 2503.

*Six total credits in humanities (List B), including at least 3 chosen from His 1110, 1121 or 1122 and six total credits in social science in two disciplines (List C) are required. The six required humanities hours and six required social science hours may be completed through a combination of Core and/or Bridge courses.

Bridge Courses (minimum 26 credits)

Bridge Course Requirements	Cornerstone
ENG 1102 (4 credits, "C" or better required)	Effective Communication, Critical Thinking
3-6 credits Humanities (List B) 3-6 credits Social Science (List C)	Awareness of Role of Social & Cultural Values, Critical Thinking
6 credits from List D	Natural and Physical Sciences
Additional hours selected from List B, C, D or STEM math options in consultation with an academic advisor. Minimum combined Core/Bridge hours = 36.	Based on course selection

Capstone Experience

Each major has a designated a capstone, seminar, or equivalent experience in which students integrate learning in the major and in the Marauder Foundation through a substantial final product of high quality, whether written, performance- based, or practice-oriented. The designated experience is completed in the major. *Requirements vary by major*.

EXCEPTIONS TO THE GENERAL EDUCATION REQUIREMENTS

Physical Activity Requirement

Students who are twenty-five or older at the time of entry into CSU or at time of re-entry after extended absence are exempt from the one-hour physical activity course requirement. Upon recommendation of a physician, a student with a physical disability may be excused from the one-hour physical activity course requirement. Students who are exempt from the physical activity requirement must make up the exempted hour to complete the minimum 120-14 hours toward graduation.

Other Exceptions

Other exceptions to the General Education requirements occur when the student's major field requires specific introductory courses. The three music degrees offered in the Department of Fine and Performing Arts have General Education Requirements that are different from the University requirements in order for these programs to meet the curriculum standards of the National Association of Schools of Music. General Education requirements for these three programs total 32-34 semester hours and are listed in the program's advisement materials.

GENERAL EDUCATION COURSE MENU

List A – Health: Physical Activity Courses	List B – Humanities and Fine Arts
• HHP 1101 Archery (1) • HHP 1102 Yoga • HHP 1103 Cycling (1) • HHP 1107 Racquetball (1) • HHP 1108 Beginning Swimming (1) • HHP 1110 Intermediate Swimming (1) • HHP 1111 Beginning Tennis (1) • HHP 1112 Advanced Tennis (1) • HHP 1113 Volleyball (1) • HHP 1114 Aerobic Dancing (1) • HHP 1115 Conditioning and Weight Training (1) • HHP 1117 Badminton (1) • HHP 1118 Walking for Fitness (1) • HHP 1119 Water Aerobics (1) • HHP 1120 Basketball (1) • HHP 1121 Fitness for Life (1)	• ART 1110 Ancient & Early European Art History (3) • ART 1120 Later European Art History (3) • ART 1210 Introduction to Art (3) • ART 1300 History of Graphic Design (3) • ART 2130 Arts of Africa (3) • ART 2140 African American Art History (3) • DRM 1100 Introduction to Theatre (3) • DRM 2201 Development of Drama: Tragedy (3) • DRM 2202 Development of Drama: Comedy (3) • DRM 2204 African American Theatre (3) • ENG 2080 Shakespeare in Our Time (3) • ENG 2100 Great Books, Great Films (3) [ENG 1102] • ENG 2101 Literature and the Global Village (3) [ENG 1102] • ENG 2103 The Literary Tradition (3) [ENG 1102] • ENG 2200 Introduction to Literary Studies (3) • ENG 2500: Literature by Black Women (3) • ENG 2600: Comics and Graphic Novels (3) • ENG 2700: Eco Literature [ENG 1102 is pre- or co-requisite] (3) • FLA 2290 Foreign Literature in Translation (3) • HIS 1100 Ohio History (3) • HIS 1110 Intro. History of Africans in the U.S. (3) • HIS 1121 Global History to 1500 (3) • HIS 1122 Global History since 1500 (3) • HIS 2201 History of the U.S. to 1877 (3) • HIS 2202 History of the U.S. since 1877 (3) • HIS 2250 Survey History of Africa (3) • HIS 2280 History of Asia (3) • IDS 1500 Introduction to Gender and Sexuality Studies (3) • IDS 2000 Introduction to Woman in American Culture (3) • MUS 1140 Music Appreciation (3) • MUS 1200 Introduction to Music Technology (3) • MUS 2233 History of Jazz (3) • PHI 2210 Survey of Global Philosophy (3) • PHI 2220 Introduction to HipHop Philosophy (3) • PHI 2230 Global Religion (3) • PHI 2240 Critical Thinking (3)

	• PHI 2250 Applied Ethics (3)

List C – Social and Behavioral Sciences	**List D – Natural and Physical Sciences**
• AGED 1010 Community Advocacy in Agriculture (3) • COM 2214 Public Speaking (3) • CRJ 1110 Introduction to Criminal Justice (3) (tentative for Fall 2024) • ECO 2200 Introduction to Economics (3) • ECO 2210 Principles of Microeconomics (3) [ECO 2010] • ECO 2220 Principles of Macroeconomics (3)	• BIO 1100 Organismal Biology w/Lab (4) • BIO 1300 Genetics and Diversity w/Lab (4) • BIO 1500 Environmental Science w/Lab (4) • BIO 2200 Biology of Aging (2) • CHM/PHY 1000 Introduction to Semiconductors (3) • CHM 1150 Elements of Chemistry w/Lab (4) • CHM 1610 Intro to Forensic Science w/Lab (4) • GEL 1101 Physical Geology w/Lab (4)

• ECO 2270 Econ. Problems of the Black Community (3) • EDU 2300 Educational Psychology (3) • GEO 1101 World Geography: Western Hemisphere (3) • GEO 1103 World Geography: Eastern Hemisphere (3) • GEO 1110 Fundamentals of Geography (4) • GEO 2202 Economic Geography (3) • PSC 1100 American National Government (3) • PSC 2205 Introduction to Africa (3) • PSY 1200 Introduction to Psychology (3) • SOC 1105 Introduction to Sociology (3) • SOC 1111 Cultural Anthropology (3) • SOC 1125 Social Problems (3) • SWK 1100 Introduction to Social Work (3)	• GEL 1105 Historical Geology w/Lab (4) • GEL 1110 Oceanography (3) • GEL 1240 Natural Disasters (3) • PHY 1110 Physical Science I (3) • PHY 1120 Physical Science II (3) • PHY 1140 Experimental Science w/Lab (2) • WRM 2200 Intro. to Water Resources Mgmt. (3) **With SCIENCE OR ADVANCED MATH requirement(s):** • BIO 2000 Evolution (2) [BIO 1100, 1300, or 1801] • BIO 2050 Bio. of the Environment (3) [BIO 1500 or 1801] • BIO 2151 Human Anatomy & Physiology I (3) [BIO 1100 or PI] • CHM 1201 General Chemistry I w/lab (4) [MTH 1750] • GEL 2205 Environmental Geology (3) [GEL 1101 or PI] • PHY 2411 University Physics I w/lab (5) [MTH 2503] • PHY 2412 University Physics II w/lab (5) [PHY 2411] • PHY 2611 College Physics I w/lab (4) [MTH 2501] • PHY 2612 College Physics II w/lab (4) [PHY 2611]

General Education Course Lists

Parentheses = Credit Hours; Brackets = Prerequisites; PI = Permission of Instructor

OHIO TRANSFER MODULE

The Ohio Transfer Module is an option that facilitates transfer among Ohio's state-assisted institutions. It is comprised of 36 credit hours. The Marauder Foundation in combination with additional hours as shown on the Transfer Module Grid meets the Ohio Department of Higher Education transfer module requirements and, along with the degree program, provides students the opportunity to tailor their university degree to their unique interests and academic needs.

INSTITUTIONAL TRANSFER

The Ohio Department of Higher Education, following the directive of the Ohio General Assembly, has developed a statewide policy to facilitate movement of students and transfer credits from one Ohio public college or university to another. The purpose of the state policy is to avoid duplication of course requirements and to enhance student mobility throughout Ohio's higher education system. Since independent colleges and universities in Ohio may or may not be participating in the transfer policy, students interested in transferring to an independent institution are encouraged to check with the college or university of their choice regarding transfer agreements.

TRANSFER MODULE

The Ohio Department of Higher Education Transfer and Articulation Policy established the Transfer Module, which is a specific subset or the entire set of a college or university's general education requirements. The Transfer Module contains 54-60 quarter hours or 36-40 semester hours of specified course credits in English composition, mathematics, fine arts, humanities, social and behavioral sciences, natural science and physical sciences and interdisciplinary coursework.

A Transfer Module completed at one college or university will automatically meet the requirements of the Transfer Module at the receiving institution once the student is accepted. Students may be required, however, to meet additional general education requirements that are not included in the Transfer Module.

CONDITIONS FOR TRANSFER ADMISSION

Students meeting the requirements of the Transfer Module are subject to the following conditions:

1. The policy encourages receiving institutions to give **preferential consideration** for admission to students who complete the Transfer Module and either the Associate of Arts or the Associate of Science degrees. These students will be able to transfer all courses in which they received a passing grade of "D" or better. Students must have an overall grade point average of 2.0 to be given credit for the Transfer Module.
2. The policy also encourages receiving institutions to give **preferential consideration** for admission to students who complete the Transfer Module with a grade of "C" or better in each course and 90 quarter hours or 60 semester hours. Students must have an overall grade point average of 2.0 to be given credit for the Transfer Module and only courses in which a "C" or better has been earned will transfer.
3. The policy encourages receiving institutions to admit on a non-preferential basis those students who complete the Transfer Module with a grade of "C" or better in each course and less than 90 quarter hours or 60 semester hours. These students will be able to transfer all courses in which they received a grade of "C" or better.

Admission to a given institution, however, does not guarantee that a transfer student will be automatically admitted to all majors, minors, or fields of concentration at that institution. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as all other students. Furthermore, transfer students shall be accorded the same class standing and other privileges as all other students on the basis of the number of credits earned. All residency requirements must be successfully completed at the receiving institution prior to the granting of a degree.

RESPONSIBILITIES OF STUDENTS

To facilitate transfer with maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Specifically, students should identify early in their collegiate studies an institution and major to which they desire to transfer. Furthermore, students should determine if there are language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will articulate with the receiving institution's major. Students are encouraged to seek further information regarding transfer from both their advisor and the college or university to which they plan to transfer.

TRANSFER APPEALS PROCESS

A multi-level, broad-based appeal process is required to be in place at each institution. A student disagreeing with the application of transfer credit by the receiving institution shall be informed of the right to appeal the decision and the process for filing the appeal. Each institution shall make available to students the appeal process for that specific college or university.

If a transfer student's appeal is denied by the institution after all appeal levels within the institution have been exhausted, the institution shall advise the student in writing of the availability and process of appeal to the state-level Articulation and Transfer Appeals Review Committee.

This State Appeals Review Committee shall hear and recommend to institutions the resolution of individual cases of appeal from transfer students who have exhausted local appeal mechanisms concerning applicability of transfer credits at receiving institutions.

PROCEDURES

A student appealing a decision on the applicability of transfer credit must have exhausted campus-level appeals and must have received a final decision before submitting the matter for further review by the State Appeals Review Committee. The State Appeals Review Committee shall have the power to obtain all records and documents used in the deliberation of the matter at the campus level. Neither the student appealing the decision, nor the representative of the institution shall have a right of personal appearance before the committee.

STEPS IN THE TRANSFER APPEALS PROCESS

1. The institution publishes both state and local appeal procedures in the catalog or other appropriate student- oriented publication.
2. The student applies for admission.
3. The institution evaluates transcript of accepted student.
4. The institution decides on applicability of credit and sends dated statement of transfer credit applicability to student along with a notification of the 90-day period for filing an appeal.
5. If the student accepts the judgment, the process ends.
6. If the student challenges the judgment, he/she appeals within the institution.
7. The institution initiates its internal appeal process which must involve individuals who did not participate in the original decision. If the institution's appeal process provides for only two stages, initial review and appeal review, then this stage must provide for an institution-wide perspective. If more than one review step is involved, the final step must involve an institution-wide perspective. At each appeal level, the institution shall respond to the appeal within 30 days of the receipt of the appeal.
8. The institution notifies the student and the department, in writing, of judgment and informs the student of the right to a state appeal process and the address to which appeals may be sent.

9. If the student accepts the judgment of the institution's internal review process, the process ends.
10. If the student challenges the judgment, the student appeals to the State Appeals Review Committee.
11. The State Appeals Review Committee notifies the student and the institution of the date of the hearing and requested information.
12. A hearing is held by the State Appeals Review Committee.
13. The State Appeals Review Committee notifies the student and the institution of advisory judgment.
14. The institution considers the advisory judgment of the State Appeals Review Committee.
15. The institution notifies the student of the disposition of the advisory judgment.
16. The process ends.

CENTRAL STATE UNIVERSITY TRANSFER APPEALS PROCESS

This appeal process will address the applicability of transfer credits between institutions. The process applies to all undergraduate courses, not just those in the Transfer Module.

Any student applying for admission to Central State University must have an official transcript(s) of credits from an accredited institution sent to the Office of Admission for review. The official transcripts from an accredited institution of accepted students will be analyzed for applicability of credits and the student will be served with a dated statement of credit applicability along with a notification of the 90-day period for filing an appeal. The Registrar, in consultation with the appropriate department chair, will determine the applicability of the general education credits.

The Department chair will determine what courses can be applied toward the major. This determination may be based on the grade received in the course as well as course content. For example, if native students are required to earn a grade of "C" or better in a course, transfer students may be required to repeat a course with a grade of "D" regardless of whether it is acceptable for the Transfer Module.

If a student disagrees with the decision of the Registrar on the applicability of courses for the general education requirements, the student may appeal that decision to the Provost and Vice President for Academic Affairs within 90 days after receiving the decision from the Registrar. The Provost and Vice President for Academic Affairs will render a final decision within 30 days after receiving the appeal. The decision of the Academic Affairs office will be final.

If a student disagrees with the decision of the chairperson on the applicability of transfer credits in the major area, that student may, within 90 days, appeal to the dean of the college who will render a decision within 30 days. If the decision of the dean of the college is unacceptable, the student may, within seven (7), days appeal to the Provost and Vice President for Academic Affairs, who will render a final decision within fifteen (15) days.

TRANSFER MODULE REQUIREMENTS

The Transfer Module must include a minimum of 36 semester credit hours of introductory courses in the following areas:

- English Composition
- Mathematics
- Arts and Humanities
- Social and Behavioral Sciences
- Natural and Physical Sciences

To complete the Central State Transfer Module, students must complete the requirements found on the CSU Transfer Module Grid and described in the "CSU Transfer Module Course Requirements and Course List."

CSU Transfer Module Course Requirements and Course List

Section A: CSU General Education Requirements Applicable to the Transfer Module

English/Oral Communication - minimum of 8 semester hours

ENG 1100 (5) Introduction to Writing and Reading for College **or** ENG 1101 (4) Introduction to Writing for College ENG 1102 (4) Writing & Researching the Essay

Mathematics, Statistics or Formal Logic - minimum of 3 semester hours

MTH 1750 (3) College Algebra

or

Advanced math option selected from:

- MTH 2001 (3) Probability and Statistics I
- MTH 2501 (3) Trigonometry
- MTH 2502 (4) Calculus I
- MTH 2503 (5) Calculus II

Arts and Humanities – minimum of 6 semester hours

HIS 1110, 1121 or 1122 (3)

Select 3 additional hours in Humanities from the Arts and Humanities section of the Transfer Module Course list.

Social Sciences – minimum of 6 semester hours

Select six hours from the Social and Behavioral Sciences section of the Transfer Module Course list.

Natural Sciences –minimum 6 semester hours. At least one course must include a lab.

Select at least 6 hours from the Natural Sciences section of the Transfer Module Course list. At least one course must include a lab for Transfer Module.

Section B: Additional Courses to Complete Transfer Module and Transfer Module Course List

To complete the Transfer Module requirements, select at least seven (7) additional hours from the Arts and Humanities, Social and Behavioral Sciences, or Natural Sciences sections of the Transfer Module Course List.

Arts and Humanities ART 1110 (3) Ancient & Early European Art History ART 1120 (3) Later European Art History ART 1210 (3) Introduction to Art ART 2130 (3) Arts of Africa ART 2140 (3) African American Art History DRM 1100 (3) Introduction to Theatre DRM 2201 (3) Development of Drama: Tragedy MUS 1140 (3) Music Appreciation MUS 2233 (3) History of Jazz PHI 2230 (3) Global Religion PHI 2240 (3) Critical Thinking PHI 2250 (3) Applied Ethics	**Social and Behavioral Sciences** ECO 2200 (3) Introduction to Economics ECO 2210 (3) Principles of Microeconomics GEO 1101 (3) World Geography West Hemisphere GEO 1103 (3) World Geography East Hemisphere GEO 1110 (4) Fundamentals of Geography GEO 2202 (3) Economic Geography HIS 2201 (3) History of the U. S. to 1877 HIS 2202 (3) History of the U. S. since 1877 PSC 1100 (3) American National Government PSC 2205 (3) Introduction to Africa PSY 1200 (3) Introduction to Psychology SOC 1105 (3) Introductory Sociology SOC 1111 (3) Cultural Anthropology

	SOC 1125 (3) Social Problems
Natural Sciences BIO 1100 (4) Organismal Biology w/lab BIO 2200 (2) Biology of Aging CHM 1150 (3) Elements of Chemistry w/lab GEL 2205 (3) Environmental Geology PHY 2211 & PHY 2212 (5) University Physics I w/lab PHY 2213 & PHY 2214 (5) University Physical II w/lab	

TRANSFER MODULE

INSTITUTION: Central State University

Effective Date: Fall 2019

(Semester Hours Precede Course Number)

Areas	(A) Minimum General Education Requirements Applied to TM (24 semester hours)	(B) Additional General Education Requirements Applied to TM (12-16 semester hours)	(C) Interdisciplinary Hours Applied to TM within Areas I-V (Ohio Articulation & Transfer Policy: Appendix B)	General Education Requirements Beyond the TM for Graduation (Courses listed in this column are not guaranteed to transfer)
I English/Oral Communication (Oral Communication – column B) Minimum 3 semester hours	TME001 First Writing (5) ENG 1100 or (4) ENG 1101 TME002 Second Writing (4) ENG 1102			(2) USS 1000 1 semester hour Physical Education Activity course
II. Mathematics, Statistics and Formal Logic Minimum 3 semester hours	Select One: (3) MTH 1750 (TMM001 College Algebra) (3) MTH 2001 (TMM010 Introductory Statistics) (4) MTH 2500 (TMM002 Pre-Calculus)	Additional hours from approved TM list in column A		

	(3) MTH 2501 (TMM003 Trigonometry) (4) MTH 2502 (TMM005 Calculus I) (5) MTH 2503 (TMM006 Calculus II) (3) BUS 2801 (Business Calculus I) (3) BUS 2802 (TMM013 Business Calculus II			
III Arts/Humanities **Minimum** **6 semester hours**	**Choose one:** (3) HIS 1121 Global History to 1500 **Choose minimum of 3 semester hours**: ART 1110 (3) Ancient & Early European Art History ART 1120 (3)	Additional hours from approved TM list in column A		

	Later European Art History ART 1210 (3) Introduction to Art ART 2130 (3) Arts of Africa ART 2140 (3) African American Art History DRM 1100(3) Introduction to Theatre DRM 2201(3) Development of Drama: Tragedy MUS 1140 (3) Music Appreciation MUS 2233 (3) History of Jazz PHI 2230 (3) Global Religion PHI 2240 (3) Critical Thinking PHI 2250 (3) Applied Ethics			
IV Social Sciences **Minimum** **6 semester hours**	**Choose minimum 6 semester hours from two**			

	different disciplines ECO 2200 (3) Introduction to Economics ECO 2210 (3) Principles of Microeconomics GEO1101 (3) World Geography Western Hemisphere GEO 1103 (3) World Geography Eastern Hemisphere GEO 1110 (4) Fundamentals of Geography GEO 2202 (3) Economic Geography HIS 2201 (3) History of the U.S. to 1877 HIS 2202 (3) History of the U.S. since 1877 PSC 1100 (3) American National Government PSC 2205 (3)	Additional hours from approved TM list in column A		

	Introduction to Africa PSY 1200 (3) Introduction to Psychology SOC 1105 (3) Introductory Sociology SOC 1111 (3) Cultural Anthropology SOC 1125 (3) Social Problems			
V Natural Sciences **Minimum** **6 semester hours** *One Lab course required*	**Choose minimum 6 semester hours from two different disciplines** BIO 1100 (4) Organismal Biology w/lab BIO 2200 (2) Biology of Aging CHM 1150 (4) Elements of Chemistry w/lab CHM 1201(4) General Chemistry I w/lab GEL 2205 (3) Environmental Geology	Additional hours from approved TM list in column A		

Subtotal of Hours	25 (Eng. 1101 option) or 26 (Eng. 1100 option)	11	0	**3** **Courses listed in this column are not guaranteed to transfer**

TRANSFER MODULE TOTAL HOURS 39-40

(Total of Columns A, B, and C)

The Transfer Module contains 36-40 semester hours of course credit.

(Note: You can obtain a catalog/brochure that lists the TM "approved" courses from the institution.)

OFFICE OF ACADEMIC PLANNING AND ASSESSMENT

Dr. Ryan Morgan,
Vice Provost of Teaching, Learning, and Program Development

The Office of Academic Planning and Assessment (OAPA) supports the scholarly, administrative, and fiscal infrastructures required to enhance the University's academic programs, manage institutional growth, maintain accreditations, and achieve the objectives of the University's strategic plan. The OAPA facilitates and supports institutional and program accreditations, assessment of student learning, and program review. Included within the OAPA are the Office of Institutional Research, the Center for Teaching and Learning (CTL), Trio Support Services, and Upward Bound.

OFFICE OF INSTITUTIONAL RESEARCH

Mr. Ahmed Kadiri, Interim Director

The Office of Institutional Research provides data to University-wide constituencies and to external stakeholders, including the Ohio Department of Higher Education and the U.S. Department of Education. The Office of Institutional Research also provides data to ensure compliance in the areas of grants and sponsored programs and athletics (NCAA).

CENTER FOR TEACHING AND LEARNING

The Center for Teaching and Learning (CTL) provides training and development to faculty during the annual Faculty Institute/Assessment Day in fall and Faculty Retreat in spring as well as through workshops and seminars throughout the academic year. The CTL also manages a faculty development and travel fund, which provides financial assistance to support faculty's professional development, and maintains Faculty Central, the University's professional development site for faculty.

The CTL manages CSU's D2L Learning Management System (LMS) and other educational technology tools for online learning. It also provides training and technical support for our students, faculty, and staff.

Freshman and Sophomore students who reside on campus and are not online degree-seeking students cannot enroll in online courses (Section code: W). Exceptions require approval from the academic advisor or student success coach.

UNDERGRADUATE RESEARCH AND STUDENT ENGAGEMENT OFFICE

Mr. Gorgui Ndao, Program Manager

The mission of the Office is to develop opportunities for students to gain academic and career advancement by providing.

- Scholarships
- Internship and Undergraduate Research Experience
- Graduate School Preparation
- Professional development
- Summer bridge programs
- Tutoring and Mentoring

The Office also offers graduate school test-taking preparation (GRE, GMAT, and LSAT), seminars and exposure to web resources. The staff members are available to speak with students on a one-on-one basis in the Center anytime during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday. The Office is committed to putting and keeping the "Students First."

TRIO STUDENT SUPPORT SERVICES

Mr. Mortenous A. Johnson, Director

The U.S. Department of Education awarded $2.2 million to Ohio's only state HBCU, the TRIO Student Support Services (SSS) five-year grant for participating students to persist and graduate from Central State University. The Department of TRIO Student Support Services is designed to serve 250 first generation students, students that are PELL eligible and/or students with a disability. This comprehensive researched based program has three measurable objectives; each intentionally aligned to the University's mission and strategic goals for participating freshmen and persisting students through the senior year of study.

SSS services include but are not limited to:

- Education, academic planning and coaching
- Supplemental and co-curricular education (on-line, intra-interpersonal and group)
- Tutorial and learning lab (small group and 24/7 on-line tutoring in all disciplines)
- Preparation for graduate and professional school visits and cultural trips
- Leadership and personal development seminars
- Financial literacy curriculum and tailored financial aid guidance sessions link money-management competencies to persistence and personal goals
- Essential career coaching seminars and workshops
- Mentoring and collaborative (*w*)rap-around services

TRIO Student Support Services' secret sauce is guided by a triangulated participant centered model. Committed staff are essential cornerstones of the program's success, demonstrating exemplary advocacy, balancing constructs of nurturing and self-determination for students' (*w*)holistic development and adherence to program objectives. The participants are thought-provoking, academically curious, energized, grounded and absolute gems. They make the program and as a result, SSS' collective work produces a "new-generation" of thought-leaders, and civic minded leaders readied for global change and transformation.

TRIO Student Support Services Accomplishments

Participants Graduation Rate 59%

Participants Good Academic Standing Rate 86%

Participants Persistence Rate 89%

UPWARD BOUND PROGRAM

Mr. John Anene, Director

The Office of TRIO/Upward Bound Program (CSUUB) is a pre-college program of robust academic instruction, tutoring, and counseling. The program provides high school students with an opportunity to enhance their academic skills necessary to successfully complete high school and enroll in and graduate from college.

The program has a summer component and academic year component. Emphasis is placed on the core college preparatory curriculum (mathematics through pre-calculus, laboratory science, foreign language, English composition and literature). There is a six-week campus summer program (four-weeks non-residential and two-weeks residential) that enhances the academic skills, introduces the participants to campus life, teaches them college survival skills, increases their social skills and provide entertainment activities. Topics include:

- **Counseling and Academic Advising** are key services offered year-round to help students solve personal, academic, and behavioral problems that impede success and assist them in discovering self-concept and social development.
- **Tutoring and Supplemental Instruction** aid participants in improving their GPAs, increasing their academic successes, and providing the motivation needed to increase academic performance.
- **Career Exploration** helps participants choose a career suitable to their skills and explore different careers in the areas of interest.
- **Financial Aid Assistance** assists in completing the necessary applications for admission and financial aid.
- **Cultural Enrichment** provides participants opportunities for social, leisure, and educational experiences.
- **Campus Visits/College Tours** exposes participants to postsecondary institutions in Ohio and college environment.
- **Parent Services** increase awareness of the importance of college preparatory curriculum and understanding of the procedures necessary for postsecondary enrollment.

ADDITIONAL UNIVERSITY OFFICES

CAMPUS POLICE

Chief Stephanie Hill

Crime is a national problem that also affects University campuses, but through a number of ongoing proactive crime awareness activities, serious criminal incidents on campus have been minimized. Central State University's campus safety record is among the best in Ohio, and the University is proud of its past record in crime prevention.

To reduce crime and to ensure that the University community is as safe and secure as possible, the Central State University Department of Public Safety employs 15 full-time officers and staff led by a Chief of Police. All officers are certified in the State of Ohio through the Ohio Peace Officer Training Academy and undergo continuing specialized training to maintain and improve their skills. All are trained in first aid and regularly train in the use of firearms.

All officers have the responsibility of protecting life and property, preventing and detecting crime, parking and traffic enforcement, fire and hazardous material inspections and providing essential police services to the campus community. Officers patrol the campus and residence halls 24 hours a day—on foot, bicycle, and in vehicles,

In addition, the Department of Public Safety coordinates with federal, state, and local authorities to enforce federal, state, and local laws as well as University rules and regulations.

OFFICE OF SPONSORED PROGRAMS AND RESEARCH

Dr. Jose Ulises Toledo, Vice President of Research and Economic Development

The mission of the Office of Sponsored Programs and Research is to maximize the success of the university in winning and executing project and program awards, whether in the form of grants, contracts, or sponsored research.

Grants and contracts from both government and private sources provide essential support for the sustenance and growth of the university. In recent years, there has been a shift toward contracts as the primary mechanism for channeling support from these agents to universities. This reflects the supporting agencies' increasing focus on demonstrating positive and tangible results deriving from the activities they are funding. The contracted project arena is generally much more competitive than the grants arena and the requirements for performance are more stringent. Since the trend toward an increasing focus on contracts as a major avenue for making funding available to universities is likely to continue, it is important that the university position itself to capture and successfully implement a fair share of the contracted projects as well as those resulting from grants.

The Office of Sponsored Programs and Research (OSP&R) is the focal point for ensuring that the university is successful in winning a reasonable number of such projects both in the short and long term, and that it is successful in the administration and execution of those projects once they are awarded. In general, sponsored activities are directly related to the three-fold mission of the institution: research, teaching, and public service.

CENTER OF EXCELLENCE IN EMERGING TECHNOLOGIES

The mission of Central State University's Center of Excellence in Emerging Technologies is to graduate a diverse workforce that is highly skilled and prepared for future jobs in emerging technologies in the Miami Valley and throughout Ohio. The Center integrates CSU's core competencies in manufacturing engineering, environmental engineering, mathematics and computer sciences, natural sciences, and technology transfer and commercialization through the National Environmental Technology Incubator. The Center will offer expertise in the integration of renewable and alternative energy supporting manufacturing and environmental protection areas.

TEACHER EDUCATION ADVISEMENT AND PARTNERSHIP CENTER (TEAP-C)

Mr. Nathan Boles, Director

The Teacher Education Advisement and Partnership Center (TEAP-C) is a support unit of the College of Education at Central State University. The Center's purpose is to assist the College of Education in

- Retaining students in teacher education programs,
- Monitoring and assisting students in strengthening pre-professional skills,
- Tracking student progress from pre-admission to program admission,
- Providing supplemental instruction in professional knowledge and skills,
- Overseeing the development of professional dispositions, and
- Developing reciprocal relationships with school districts and community colleges.

TEAP-C programs and services include.

- Guiding students through the teacher education admission process,
- Provide informational webinars for the College of Professional Education for student requirements in licensure and non-licensure programs.
- Coordinating services to assist in preparing students to take and pass the Ohio Assessments for Educators (OAE)
- Provide supportive services in student information and development for state teacher licensure and the EPP in the College of Education
- Inform secondary 11th-12thgrade students on licensure programs offered in the College of Education.

INTERCOLLEGIATE ATHLETICS

Ms. Kevicia Brown, Athletic Director

As a Division II member of the NCAA, the Central State University Department of Intercollegiate Athletics believes that higher education has lasting importance on an individual's future success. For this reason, the emphasis for the student- athlete experience in Division II is a comprehensive program of learning and development in a personal setting. The

Division II approach provides growth opportunities through academic achievement, learning in high-level athletic competition and development of positive societal attitudes in service to community. The balance and integration of these different areas of learning opportunity provides Division II student-athletes a path to graduation while cultivating a variety of skills and knowledge for life ahead.

The Central State University Athletics Department is committed to providing the student-athlete with a rich and vibrant sporting experience in which to pursue their principal objective: to graduate from Central State University.

We strive to provide a nurturing, challenging, and culturally enriched environment that embodies the Core Values of Central State University, Honesty, Hard Work, Caring and Excellence.

We are dedicated to:

- The balance and benefits of scholarship and athletics.
- Teaching student-athletes to be self-reliant.
- Using the lessons of sports to produce future leaders; and
- Graduation of our student-athletes.

Central State University (CSU) is a Division II Member of the National Collegiate Athletic Association (NCAA). CSU is a member of the Southern Intercollegiate Athletic Conference (SIAC).

The Department of Intercollegiate Athletics sponsors 11 sports at the NCAA Division II level:

- Football
- Men's & Women's Basketball
- Men's & Women's Volleyball
- Men's & Women's Cross Country and Indoor and Outdoor Track & Field

Intercollegiate Athletics play a major role in the development of young men and women. It also contributes to the quality of campus life and serves as an Ambassador for CSU. As a member of the NCAA, prospective student-athletes are required to have a minimum GPA and an SAT/ACT score to be eligible for competition. For more information on NCAA rules and regulations, please visit www.NCAA.org or www.eligibilitycenter.org or contact the Athletic Compliance Office at (937)- 376-6060. For more information on Central State University Athletics, please visit www.maraudersports.com.

HALLIE Q. BROWN MEMORIAL LIBRARY

Ms. Carolin Sterling, Director

The general mission of the library is to provide support to the academic programs of the university. The collection is designed to support undergraduate and graduate instruction and research. The facility provides space for individual and group study and specialized activities. Library services include research assistance, class reserves, inter-institutional borrowing, and Interlibrary Loan/Document Delivery. The philosophy of the library faculty and staff is to meet all students at individual thresholds and to help each one towards academic success.

The current collection includes over 377,000 print volumes, over 240,000 eBooks, and 65 current print journal/magazine titles, over 200 research databases, including over 12,000 journals in the Electronic Journal Center (EJC), over 50,000 online videos, over 30,000 bound periodicals, and 4,000 audiovisual resource items. Special microform collections include the American Missionary Association Manuscripts, Boston Symphony Orchestra Program notes, Galloway Collection, papers of George Washington Carver, Charles Chestnut, Paul Laurence Dunbar, John P. Green, and George A. Myers, the Atlanta University Black Culture Collection, and the ERIC (Educational Resource Information Center) collection of 846,190 microfiche items relating to educational research.

The library is a founding member of OhioLINK (Ohio Library and Information Network), a consortium of one hundred and seventeen libraries at eighty-eight institutions, including all of Ohio's public four-year and two-year universities and colleges, the State Library of Ohio, and private colleges and universities. The OhioLINK online catalog provides access to more than fifty million library items. Students, staff, and faculty can request books and audiovisual materials from any internet-connected computer without library staff assistance. Students, faculty, staff, and card holders from participating public libraries can use the OhioLINK Library Catalog to find and request materials online. The material is delivered to the library where it is held for pickup. The library also participates in an active Interlibrary loan service.

The Learning Commons, located on the main floor of the library, offers an integrated, user-centered environment to support learning, teaching, and research. Attractive, convenient, and flexible, the Commons has collaborative as well as individual study space. Learning support is available at the reference desk where librarians are available for consultation.

Facility and Equipment

- Audiovisual equipment
- Computer labs
- Curriculum Library
- Production Lab
- Microform reader/printers
- Small Group Study Rooms
- Study Carrels, Tables, and Lounge Furniture

Services

- Information Literacy Instruction
- Course Reserves
- Inter-Institutional Borrowing
- Notary Service
- Interlibrary Loan
- Reference (Library Research Help)
- Short-Term Laptop Lending
- Printing, Copying, Scanning, and Fax Services

Special Collections

- Archives
- Black Collection
- Microfilm Collections

HONORS COLLEGE

Dr. Thomas Spencer, Executive Director

The Central State University Honors College is an interdisciplinary home for highly motivated and high-achieving students. Students' commitment to excellence, leadership in community service, and impressive academic records qualify them to join the honors community–a select group of highly motivated, energetic, imaginative, and dedicated student leaders and scholars.

HONORS COLLEGE ADMISSION

Students must apply to be admitted to the Honors College. Entering Freshmen

- 3.5 or higher unweighted cumulative high school GPA
- Evidence of extracurricular and/or
- service activities

Transfer and Current CSU Students

- 3.5 or higher GPA unweighted cumulative GPA with 12 or more credits earned.
- Evidence of extracurricular and/or service activities
- Honors credits and designations from other institutions will transfer.

HONORS CURRICULUM

Admitted Honors Students have four options for graduating as Honors Scholars. For each designation and academic distinction, students will be given a medallion to wear at Commencement.

General Honors
Course Requirements:

- Working with the Honors Advisor, select ONE of the following options:
    - 3 in-course honors projects in courses that count toward the student's General Education course requirements
    - 3 honors sections of General Education courses
    - 2 in-course honors projects and 1 honors section of a General Education course
    - 1 in-course honors project and 2 honors sections of General Education courses
- B grade or above in the courses in which honors projects were completed
- 3.5 Cumulative GPA

Honors in the Major

Course Requirements:

- 3 in-course honors projects in courses which are required for the student's major or from courses which are approved electives for the major
- B grade or above in the courses in which honors projects were completed
- 3.5 Cumulative GPA

University Honors

Honors Students who complete both the General Honors and Honors in the Major requirements and graduate with a 3.5 or higher cumulative GPA will receive University Honors.

International Honors

Honors Students who participate in and return from a University-led or approved study abroad program will:

- Coordinate with the Honors College to provide a campus- and community-wide presentation
- Discuss the process undertaken to participate in study abroad.
- Describe the study abroad program in detail.
- Provide details about the country or countries to which the student travelled (geography, culture, demographics, industry, government, etc.)
- Describe life in the country or countries visited from your perspective
- Discuss what was learned from the experience and what the experience means to the student

For International Students:

Honors Students who are from another country and who have completed at least one semester in the US will:

- Coordinate with the Honors College to provide a campus- and community-wide presentation.
- Discuss the process undertaken to come to Central State University and the United States to study.
- Describe the positives and negatives of coming to the US to attend CSU.
- Provide details about the country or countries from which the student came (geography, culture, demographics, industry, government, etc.)
- Describe life in the country or countries in which you have lived.
- Discuss what has been learned from studying in the US and what the experience means to the student.

HONORS STANDINGS

To remain a member of the Honors College and graduate with Honors College Designations (*General Honors, Honors in the Major, University Honors,* and *International Honors*), students must be in good standing. Students must graduate with a 3.5 or higher cumulative GPA to receive these designations. Students with a cumulative GPA below 3.5 will lose access to Honors Housing the following academic year. Students with a cumulative GPA below 3.5 will lose access to Honors Scholarships the next semester.

Honors Student in Good Standing

- Maintaining a 3.5 or higher cumulative GPA
- Successfully completing at least 1 in-course honors project or honors section course per academic Meeting with Honors and International Advisor at least once a semester.

Honors Probation – any honors student meeting one or more of the following criteria is considered on probation.

- Earning below a 3.5 cumulative GPA
- Not completing any in-course honors project or honors section course per academic year
- Not meeting with Honors and International Advisor once a semester

Removal from the Honors College - any honors student meeting one or more of the following criteria will be removed from the Honors College

- Having below a 3.5 cumulative GPA for two consecutive semesters (Fall and Spring)
- Not completing at least 1 in-course honors project or honors section course over the course of three consecutive semesters
- Not meeting with Honors and International Advisor for two consecutive semesters Removal from the Honors College - Student Code of Conduct Violations

The Honors College strives to maintain a community of lifelong learners who demonstrate respect for themselves, others and the University. Any honors student found in violation of the University's Student Code of Conduct is **subject to removal** from the Honors College. Potential consequences of removal could include

loss of:

- Scholarships
- Honors Hall Residency
- Support Services
- Access to Honors College Programs and Activities
- Access to the Living Learning Community Programs and Activities

An appeal to removal must be sent to the Executive Director of the Honors College in writing for consideration and final determination by the Honors Staff.

HONORS COLLEGE AWARD CEREMONY

The Honors College Award Ceremony is a formal ceremony held shortly before Commencement to recognize the outstanding academic achievements of graduating Honors College Students in good standing. Honors College Graduates may be awarded Gold Cords and Latin distinction awards in accordance with the graduate's final cumulative grade point average (*Cum Laude*, *Magna Cum Laude*, and *Summa Cum Laude*). Graduating Honors Students may also receive Honors Designation awards (*General Honors*, *Honor in the Major*, *University Honors*, and *International Honors*) based on the successful completion of specific Honors College criteria for each designation.

THE TITLE III PROGRAM

Ms. Karen Franklin, Director

Title III, Part B is a federal institutional development grant that provides financial assistance to Historically Black Colleges and Universities (HBCUs) to establish or strengthen their physical plants, financial management, academic resources, and endowment building capacity. Activities may include student services, educational equipment acquisition, facility construction, and faculty and staff development. It is a formula-based discretionary grant made to the President

PURPOSES OF TITLE III STRENGTHENING INSTITUTIONAL PROGRAMS AT CSU

The U.S. Department of Education's Institutional Development and Undergraduate Education Service (IDUES) administers the Title III Program. The Title III Program is focused on institutions that enroll large proportions of underrepresented students. It strengthens these institutions by

- Improving Academic Quality
- Improving Fiscal Stability
- Improving the Quality of Student Services
- Improving the Quality of Institutional Management at Central State

University, Title III support is used to

- Enhance the quality of academic services.
- Increase student enrollment and qualified faculty and staff
- Improve the financial stability of CSU.
- Facilitate alignment of the institution with successful execution of strategic initiatives.

CENTRAL STATE UNIVERSITY – DAYTON

Central State University has served the Dayton metropolitan community since the spring of 1973. We offer the distinctive Central State supportive atmosphere and quality education while contributing to the success of the region. Programs offered are accredited by the Higher Learning Commission

CSU-Dayton extends the University's instructional programs beyond the main campus to an increasing adult population seeking postsecondary education in the region. Our academic programs are specifically designed for the busy lives of adults who seek to complete a degree begun elsewhere, or who select Central State University as their institution of choice. In addition, traditional commuter students may enroll in classes at CSU-Dayton for convenience of travel. Our daytime, evening, Saturday, and online class schedules allow students to complete a Bachelor of Science degree in Business Administration with a concentration in Management or a Bachelor of Science degree in Education. In addition, there are expanded courses that would lead towards a degree in Management Information Systems; Criminal Justice; Intervention Specialist and Social Work. *You can also complete General Education Requirements towards other degrees offered at our Wilberforce, Ohio campus.*

Faculty members from the Wilberforce campus are joined by local professionals who serve as adjunct faculty members to deliver quality, specialized instruction. Traditionally, CSU-Dayton offers small classes which allow for personal attention and the opportunity to pace learning at the student's comfort level. Technology has increased the availability and opportunity for engaging in scholarly conversation. Faculty members correspond with students via e-mail, chat rooms, and virtual learning platforms designed for both faculty-student and student-student discussions. Two state-of-the art computer labs provide internet access to the Hallie Q. Brown Memorial Library on the Wilberforce campus and for exploration and research.

As an integral part of the Dayton/Miami Valley region, CSU-Dayton endeavors to serve the community through outreach services and programs. High school students may earn college credits through the College Credit Plus program.

FIRST-AND SECOND -YEAR STUDENT SUCCESS CENTER

LaKeisha Jenkins Washington, Executive Director

The First- and Second-Year Student Success (FSYSS) aids in the increase of student success rates at the university by offering comprehensive academic and student support services. It is designed to assist students in developing positive relationships with faculty, staff, and other students, which will foster a strong academic and co-curricular foundation at CSU. Additionally, FSYSS provides programming that aims to equip students with vital skills, habits, and dispositions needed to achieve academic success. FSYSS overarching goal is to provide services for all new first-time, freshmen and sophomores, international, and academic probation students, which includes continuing students (with 59 semester credit hours or less). The First- and Second-Year Student Success (FSYSS) contains three areas: Academic Advising and Coaching, Office of Student Support and Instructional Services (OASIS), and Strategic Programs.

ACADEMIC ADVISING AND COACHING

Academic Advising and Coaching services incoming first-year, international, Freshman-readmit, academic probation, transfer freshmen and sophomores, and continuing freshmen and sophomore students in developing their educational aspirations. Communication from the institution's LMS, student CRM, and Student Success Coaches promptly provides students with important information to achieve academic success. Thus, resulting in declaring and/or changing their majors, course scheduling, and supporting continuing freshmen who are in academic distress (on academic probation or have been re-admitted to the university following a period of academic suspension). Students in academic distress work closely with their Student Success Coaches and the Marauder Achievement Program Success Coach to achieve their academic and career objectives and access resources geared toward academic success.

FIRST-YEAR COURSE OFFERING

USS 1000: Undergraduate Success Seminar is a two-credit hour course that is a general education requirement for all first-year students. It is a face-to-face course that provides students with the opportunity to acquire and apply the practical knowledge and skills necessary for success at the college level to fulfill the graduation requirement. This course is a General Education requirement. Topics will align with CSU history and traditions, computer literacy, social and cultural values, health and wellness, and the required course is outlined in D2L. Its objectives include: (1.) Make choices that promote wellness and healthy lifestyles (2.) Demonstrate effective communication skills, both written and verbal (3.) Demonstrate critical thinking skills (4.) Apply quantitative reasoning and the scientific process and (5.) Demonstrate awareness of social and cultural factors affecting learning. In addition to live seminars, this course includes participation in qualifying campus events, completion and/or submission of online coursework, and newly added weekly freshmen convocations (Tuesdays).

OFFICE OF ACADEMIC SUPPORT AND INSTRUCTIONAL SERVICES (OASIS)

The Office of Academic Support & Instructional Services (OASIS) is committed to assisting students in becoming independent learners by pairing them with peer tutors and/or supplemental instructors (SI Leaders), providing workshops and private sessions with reading, writing, and/or math specialists. OASIS offers a range of programs and services to cater to all students, but its primary focus is on assisting new and continuing freshmen in achieving academic success. These programs and services include learning skill development and tutorial programs to assist students in completing their current and unsuccessful courses. Peer tutoring services and supplemental instruction are typically 1:1 and are available at no cost to any student who is currently enrolled at CSU. Tutoring is available in several courses, many of which are general education courses. A tutoring or supplemental instruction request can be initiated by a student, an instructor, a student success

coach, a faculty advisor, or a staff member, simply by the completion of a tutor or supplemental instruction request form. These forms are available at the lower level of the Hallie Q. Library.

STRATEGIC PROGRAMS

Strategic Programs aim to increase the retention of first-year students while closing the gaps for Sophomore students by creating and implementing initiatives that address the Six Pillars of Access and their social developmental skills. Strategic Programs personnel collaborate with other units within First- and Second-Year Student Success (FSYSS), our three Colleges, and Student Affairs to ensure students have a well-balanced academic and social foundation that rich their collegiate experience. This experience includes integrating varied resources and initiatives with offices, such as the Office of Financial Aid, Career Services, Academic Empowerment and Accessibility, Student

Engagement & Leadership, Residence Life, Health and Counseling Services, and student outreach opportunities at CSU-Dayton to monitor and track student success. In addition, intentional services, such as working with the Strategic Retention task force, faculty liaisons, student success coaches, and the student CRM team to implement our campus-wide "early alert" notification system as a means of monitoring student attendance and progress in classes; aid intervening when appropriate with students who have been identified as having frequent absences; and tracking the student's progress at the beginning of the semester, midterm, and beyond.

FIRST-YEAR EXPERIENCE (FYE)

First Year Experience (FYE) provides new student transition services, success coaching, and initiative-based programming for first-year, transfer, and continuing **freshmen** students.

As we support new and continuing students, we desire to:

1. Build community through an engagement-driven orientation and outreach experience;

2. Enhance connections with services and resources coordinated within the campus community;

3. Create confidence in self-awareness and learning to enable student preparedness for collegiate study;

4. Promote proactive interactions with students to meet early detection and intervention needs.

FIRST-YEAR EXPERIENCE COURSE OFFERINGS

The USSC further establishes an academic foundation rooted in the implementation and coordination of First- Year Experience course offerings.

USS 1000. Undergraduate Success Seminar (I, II; 2) This is a two-credit hour course that provides opportunities for students to learn and apply practical knowledge and skills required for success at the college level. Topics include CSU resources, policies, and processes; utilization of technology; health and wellness; financial and information literacy, and the history of HBCU's, and CSU, within their cultural and historical context. The course consists of live seminars, completion of online coursework, and participation in qualifying campus events. This course is a General Education requirement for all first-year students and is a graduation requirement.

USS 1200. Undergraduate Success Skills (I, II; 1) Designed to help students with goal setting, financial literacy, time management, study skills, and reflection. This course is structured for students to develop and implement a successful academic plan to sustain matriculation. It is a requirement for freshmen with an academic standing of "probation." Our newest initiative is the Marauder Achievement Program. This is a mandatory, three-tier Academic Probation

program for first-year students who fall below a 2.0 GPA. The role of the student is to take academic responsibility with support from the Undergraduate Student Success Center. The Marauder Achievement Program is in collaboration with USS 1200, providing the students with an effective curriculum to get the student off probation and into good academic standing.

RETENTION AND ACADEMIC SUCCESS (RAS)

Retention and Academic Success aims to increase the retention of Freshmen students admitted to the institution as first-time freshmen, transfer students, re-admit, and continuing students. Program personnel work to collaborate with other units within the Undergraduate Student Success Center, Enrollment Management, each College, and Student Affairs to ensure students have a well-balanced academic and social foundation coupled with a rich collegiate experience. This experience includes integrating varied resources and initiatives with offices, such as **the** Office of Financial Aid, Career Services, Academic Empowerment and Accessibility, Student Engagement & Leadership, Residence Life, Counseling Services, and student outreach opportunities at CSU-Dayton to monitor and track student success. In addition, RAS provides intentional services, such as working with the Strategic Retention task force, faculty members, student success coaches **,** and the student CRM team to implement our campus-wide "early alert" notification system as a means of monitoring student attendance and progress in classes; intervening when appropriate with students who have been identified as having frequent absences; and tracking the student's progress at the beginning of the semester, midterm, and beyond.

COLLEGE OF BUSINESS

Dr. Frederick A. Aikens, Dean

VISION

The College of Business aspires to be globally recognized by its stakeholders for preparing graduates for success in business and society.

MISSION STATEMENT

The College of Business is committed to providing students with a nurturing educational environment in their personal and professional endeavors. We emphasize academic excellence in teaching, research and outreach in a dynamic global business environment.

The College of Business prepares students for careers in business, government, private and public non-profit organizations and for graduate school. The college takes great care to ensure that graduates are well rounded individuals through its "Triad for Success" which includes emphasis on academics, experiential learning and professional development. Other objectives of the college are to:

1. Provide students with an understanding of the application of business principles and operations to actual work experience or practical problem-solving activities.
2. Assist students in understanding their responsibility to the economic system and the political and social environment.
3. Provide learning experiences that involve state of the-art technology particularly as it relates to computerization and expert systems.
4. Provide experience which will enable the student to develop interpersonal skills necessary for proper functioning in a variety of social settings.
5. Develop within students an appreciation for the fact that the work world of today is not limited by national boundaries. In fact, a global perspective is necessary to succeed in today's dynamic international environment.

ADMISSION REQUIREMENTS

Students will be admitted to the College of Business upon entry to the university by declaring a major within one of the college disciplines.

STUDENT RESPONSIBILITY

Students in the College of Business are required to confer with an assigned faculty advisor on a regular basis. Beyond this advisement, students are personally responsible not only for selecting their academic programs, but also for adhering to all published regulations, requirements and policies of the University and college. Students are expected to seek regular academic advisement and ultimately are individually responsible for completing all degree requirements.

During the Spring Semester immediately prior to the year in which a student expects to graduate, students must confer both with their advisor and the chair of the major department for a final degree checkout and preparation of an application for graduation.

TRANSFER OF CREDITS

Central State University accepts transfer credit from colleges and universities accredited by regional accrediting associations. The registrar will determine whether the university accepts credit from other universities. Under state law, the university is required to accept grades of "D" or better for transfer credit from state assisted colleges and universities in Ohio. (Credits from "D" grade courses will count towards the 120 credits required for graduation. However, the student may still need to repeat the class if Central State University requires a "C" grade in the course). Grades of "C" or better are generally acceptable from out-of-state schools. Department chairs will determine whether credits accepted by Central State University may be used to satisfy major requirements.

DEGREE REQUIREMENTS

The General Education Program, a common core of 38 semester hours, is central to the University's mission of providing students with a liberal arts background. The remaining hours that must be taken to earn a total of at least 120 semester hours are designated by the departmental major requirements and the student's choice of free electives. However, majors in the college are urged to choose, with an advisor, courses that provide the student with a second field of interest or a strong minor concentration.

- Completion of a minimum of 121 semester hours with a grade point average of 2.0. Some departments or programs may require additional hours and a higher-grade point average.
  *NOTE: 150-semester credits (to include 30 accounting credits and 24 business credits) and an earned baccalaureate degree are required to apply for certification as an Ohio CPA (Accountancy Board of Ohio, 2023).
- Completion of at least 30 semester hours in a major field. Some departments may require additional hours.
- Completion of the University's General Education Requirements.

ACCOUNTING PROGRAM

DOUBLE MAJORS WITH BUSINESS ADMINISTRATION

Given the many overlapping requirements in the degree programs in Economics and Business Administration, it is possible for a student to major in both by focusing on the choice of elective courses in these areas. Economics courses can be electives for the Business Administration major and business courses may serve as electives for the Economics major.

CAREER PROSPECTS

In general, department graduates pursue advanced graduate school studies in Accounting, Finance, and Economics or begin their professional careers. Graduates go directly to the professional labor market prepared to develop successful careers with the Federal Reserve System, national and state banks, state and federal government agencies, private industry, as well as financial services. These graduates are prepared for research and consulting work in corporate enterprises, labor unions, private research organizations and law. These graduates are also prepared for postgraduate studies.

BACHELOR OF SCIENCE ACCOUNTING PROGRAM DESCRIPTION

The accounting curriculum prepares students for successful careers in business, government, and public accounting. The courses seek to prepare the students for direct entry into the accounting environment with minimal on-the-job training, as well as prepare students for graduate studies. Technology-based instruction is an integral part of the curriculum.

DEGREE REQUIREMENTS

Bachelor of Science in Accounting - University (General Education) and Business Administration Department Requirements listed previously and the following accounting requirements: ACC 2210, ACC 2220, ACC 3301, ACC 3302, ACC 3330, ACC 3340, ACC 3360, ACC 4420, ACC 4430, and ACC 4495, BUS 4785, ECO 3320, and MIS 2251 and MIS 2252, and approved electives adding to a total of 121 hours. Students are required to earn all C's or better in their major and concentration and also maintain at least a GPA of 2.25 in their degree program. * NOTE: 150-semester credits (to include 30 accounting credits and 24 business credits) and an earned baccalaureate degree are required to apply for certification as an Ohio CPA (Accountancy Board of Ohio, 2023).

BACHELOR OF SCIENCE IN ACCOUNTING–ENG 1100 or ENG 1101 and ENG 1102; MTH 1750; HIS 1110, HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences -6 hours from 2 different disciplines from List C; Natural and Physical Sciences-6 credit hours from List D; USS 1000 and 1 HHP Activity from List A and an additional 9 hours from List B, C or D. All accounting students are required to take the following College of Business courses: BUS 1100, BUS 2200, BUS 2203, BUS 2260, BUS 2343, BUS 2353, BUS 2801, BUS 2802, BUS 2901, BUS 2902, BUS 3331, BUS 3370, BUS 4785, ECO 2210, ECO 2220, ECO 3320, MIS 2251, MIS 2252; and Accounting major requirements: ACC 2210, ACC 2220, ACC 3301, ACC 3302, ACC 3330, ACC 3340, ACC 3360, ACC 4420, ACC 4430, ACC 4450, ACC 4495. A total of 123 semester hours is the minimum for a Bachelor of Science degree in Accounting. Students are required to earn all C's or better in their major and concentration and maintain at least a GPA of 2.0 in their degree program.

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree. Minimum hours needed to obtain a Bachelor of Science in Accounting – 121

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BUS 1100	Contemporary American Business	3	ENG 1102	Writing and Research the Essay	4
ENG 1101	Introduction to Writing for College	4	BUS 1500	Computer Applications for Business	3
USS 1000	Undergraduate Success Seminar	2	MTH 1750	College Algebra	3
HIS 1XXX	1100, 1121, or 1122	3	ELECTIVE	From General Education List B	3
ELECTIVE	From General Education List B, C, or D	3	ELECTIVE	From General Education List C	3
HHP 1XXX	HHP Activity from List A	1			
Total		16			16
Sophomore			Sophomore		
ACC 2210	Financial Accounting	3	ACC 2220	Managerial Accounting	3
BUS 2200	Legal Environment of Business	3	BUS 2260	Business Communication	3
BUS 2801	Business Calculus I	3	BUS 2802	Business Calculus II	3
ECO 2210	Principles of Microeconomics	3	BUS 2203	Professional Development	3
MIS 2252	Spreadsheets for Business Analysis	3	ECO 2220	Principles of Macroeconomics	3
			ELECTIVE	From General Education List D	3
Total		15			17
Junior			Junior		
ACC 3301	Intermediate Accounting I	3	ACC 3302	Intermediate Accounting II	3
ACC 3340	Cost Accounting	3	ACC 3360	Accounting Information Systems	3
BUS 2400	Management and Organizational Behavior	3	BUS 3331	Principles of Finance	3
BUS 2903	Business Statistics	3	ELECTIVE	BUS Elective	3
ELECTIVE	From General Education List D	3	BUS 2353	Principles of Marketing	3
Total		15			15
Senior			Senior		
ACC 3330	Advanced Accounting	3	ACC 4430	Auditing	3
ACC 4420	Federal Income Tax	3	ACC 4495	Seminars in Accounting	3
BUS 4785	Operations Management	3	BUS 3370	International Business	3
ELECTIVE	From General Education List B, C, or D	3	ELECTIVE	From General Education List C	3
FIN 4442	Financial Statement Analysis	3	ELECTIVE	From General Education List B, C, or D	3

BUSINESS ADMINISTRATION

Program Description: The Department of Business Administration offers Concentrations in Agribusiness, (AGB), Entrepreneurship (ENT), Finance (FIN), Hospitality Management (HMP), International Business (INB), Management (MGT), Management Information Systems (MIS), and Marketing (MKT). Bachelor of Science Degree in Accounting is also housed within the Department of Business Administration. The department seeks to help students develop an excellent knowledge of business in general and in their specialized concentration in particular. This provides the students with the learning atmosphere to enhance their confidence necessary for success in the business world.

Business Program Goals The learning goals of the Business programs are to produce graduates who:

1. Demonstrate effective written and oral communication skills.
2. Possess analytical problem solving and critical thinking skills.
3. Are globally and environmentally aware.
4. Display competence in business productivity skills
5. Possess a professional disposition.

DEGREE REQUIREMENTS

Detailed course requirements for all business concentrations and specific requirements for each individual concentration are available in check sheets from the department's office. Students are required to earn all C's or better in their major and concentration and also maintain at least a GPA of 2.0 in their degree program.

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION – Agribusiness Concentration – ENG 1100 or ENG 1101 and ENG 1102; MTH 1750; HIS 1110, HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from 2 different disciplines from List C; Natural and Physical Sciences- 6 credit hours from List D; USS 1000 and 1 HHP Activity from List A and an additional 9 hours from List B, C or D.

The following business requirements: ACC 2210 and ACC 2220, BUS 1100, BUS 1500, BUS 2200, BUS 2203, BUS 2343, BUS 2353, BUS 2260, BUS 2261, BUS 2801, BUS 2802, BUS 2903 BUS 3331, BUS 3510 BUS 3370, BUS 4785 and BUS 4795, ECO 2210, ECO 2220 and MIS 3371. Also, the following Agribusiness Concentration requirements: AGB 2300, AGB 3240, AGB 4445, AGB 4745 and 3 hours of Agribusiness Electives and 3 hours of approved electives. Students are required to earn all C's or better in their major and concentration and also maintain at least a GPA of 2.0 in their degree program.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION CONCENTRATION IN Agribusiness

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Business Administration – Agribusiness Concentration – 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BUS 1100	Contemporary American Business	3	BUS 1500	Computer Applications for Business	3
ENG 1101	Introduction to Writing for College	4	BUS 2801	Business Calculus I	3
USS 1000	Undergraduate Success Seminar	1	ENG 1102	Writing and Research the Essay	4
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B, C, or D	3
HHP 1XXX	HHP Activity from List A	1	ELECTIVE	From List C	3
MTH 1750	College Algebra	3			
Total		16			16
Sophomore			Sophomore		
ACC 2210	Financial Accounting	3	ACC 2200	Managerial Accounting	3
BUS 2200	Legal Environment of Business	3	BUS 2260	Business Communication I	3
BUS 2400	Management and Organizational Behavior	3	BUS 2353	Principles of Marketing	3
BUS 2802	Business Calculus II	3	BUS 2903	Business Statistics	3
ECO 2210	Principles of Microeconomics	3	ECO 2220	Principles of Macroeconomics	3
Total		15			15
Junior			Junior		
ELECTIVE	BUS Elective	3	BUS 2203	Professional Development	2
BUS 3331	Principles of Finance	3	BUS 3370	International Business	3
BUS 2261	Business Communication II	3	MIS 3371	Information Management	3
AGB 2300	Introduction to Agribusiness	3	AGB 3240	Farm Management	3
ELECTIVE	From List D	3	ELECTIVE	From List B, C, or D	3
Total		15			14
Senior			Senior		
BUS 4785	Operations Management	3	BUS 4795	Strategic Management	3
PHI 2240	From List B	3	BUS 3510	Business Intelligence	3
AGB 4445	Agricultural Economics	3	AGB 4745	Ag Policy – Capstone	3
AGB XXXX	Agribusiness Elective	3	ELECTIVE	From List C	3
ELECTIVE	From List D	3	ELECTIVE	From List B, C, or D	3
Total		15			15

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION -Entrepreneurship Concentration –ENG 1100 or ENG 1101 and ENG 1102; MTH 1750; HIS 1110, HIS1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences -6 hours from 2 different disciplines from List C; Natural and Physical Sciences-6 credit hours from List D; USS 1000 and 1 HHP Activity from List A and an additional 9 hours from List B, C or D.

The following business requirements: ACC 2210 and ACC 2220, BUS 1100, BUS 1500, BUS 2200, BUS 2203, BUS 2343, BUS 2353, BUS 2260, BUS 2261, BUS 2801, BUS 2802, BUS 2903 BUS 3331, BUS 3370, BUS 3510, BUS4785 and BUS 4795, ECO 2210, ECO 2220 and MIS 3371. Also, the following Entrepreneurship Concentration requirements: ENT 3135, ENT 3355, ENT 3505, ENT 4895, and 3 hours of Entrepreneurship Electives and 3 hours of approved electives. Students are required to earn all C's or better in their major and concentration and also maintain at least a GPA of 2.0 in their degree program.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION CONCENTRATION IN ENTREPRENEURSHIP

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Business Administration –Entrepreneurship Concentration –120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BUS 1100	Contemporary American Business	3	BUS 1500	Computer Applications for Business	3
ENG 1101	Introduction to Writing for College	4	BUS 2801	Business Calculus I	3
USS 1000	Undergraduate Success Seminar	1	ENG 1102	Writing and Research the Essay	4
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B, C, or D	3
HHP 1XXX	HHP Activity from List A	1	ELECTIVE	From List C	3
MTH 1750	College Algebra	3			
Total		16			16
Sophomore			Sophomore		
ACC 2210	Financial Accounting	3	ACC 2200	Managerial Accounting	3
BUS 2200	Legal Environment of Business	3	BUS 2260	Business Communication I	3
BUS 2400	Management and Organizational Behavior	3	BUS 2353	Principles of Marketing	3
BUS 2802	Business Calculus II	3	BUS 2903	Business Statistics	3
ECO 2210	Principles of Microeconomics	3	ECO 2220	Principles of Macroeconomics	3
Total		15			15
Junior			Junior		
ELECTIVE	BUS Elective	3	BUS 2203	Professional Development	2
BUS 3331	Principles of Finance	3	BUS 3370	International Business	3
BUS 2261	Business Communication II	3	ENT 3135	Entrepreneurship Management	3
MIS 3371	Information Management	3	ELECTIVE	From List D	3
ELECTIVE	From List D	3	ELECTIVE	From List B, C, or D	3
Total		15			14
Senior			Senior		
BUS 4785	Operations Management	3	BUS 4795	Strategic Management	3
PSY 1200	From List C	3	BUS 3510	Business Intelligence	3
ENT 3355	Comp Entrepreneurship Enterprise	3	ENT 4895	Entrepreneurship Capstone	3
ENT 3505	Entrepreneurship & New Ventures	3	ENT XXXX	ENT Approved Elective	3
PHI 2240	From List B	3	ELECTIVE	From List B, C, or D	3
Total		15			15

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION –Finance Concentration –ENG 1100 or ENG 1101 and ENG 1102; MTH 1750; HIS 1110, HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences -6 hours from 2 different disciplines from List C; Natural and Physical Sciences-6 credit hours from List D; USS 1000 and 1 HHP Activity from List A and an additional 9 hours from List B, C or D.

The following Finance major requirements: ACC 2210 and ACC 2220, BUS 1100, BUS 1500, BUS 2200, BUS 2203, BUS 2343, BUS 2353, BUS 2260, BUS 2261, BUS 2801, BUS 2802, BUS 2903 BUS 3331, BUS 3370, BUS 3510, BUS 4785 and BUS 4795, ECO 2210, ECO 2220 and MIS 3371. Also, 9 hours from the following Finance courses: FIN 3332, FIN 3333, FIN 4431, and six hours from the following courses: FIN 2233, FIN 3334, FIN 3335, FIN 3336, FIN 3337, FIN 3338, FIN 4432, FIN 4437, FIN 4438 or FIN 4466 and 3 hours of approved electives. Students are required to earn all C's or better in their major and concentration and also maintain at least a GPA of 2.0 in their degree program.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION CONCENTRATION IN FINANCE

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Business Administration – Finance Concentration - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BUS 1100	Contemporary American Business	3	BUS 1500	Computer Applications for Business	3
ENG 1101	Introduction to Writing for College	4	BUS 2801	Business Calculus I	3
USS 1000	Undergraduate Success Seminar	1	ENG 1102	Writing and Research the Essay	4
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B, C, or D	3
HHP 1XXX	HHP Activity from List A	1	ELECTIVE	From List C	3
MTH 1750	College Algebra	3			
Total		16			16
Sophomore			Sophomore		
ACC 2210	Financial Accounting	3	ACC 2200	Managerial Accounting	3
BUS 2200	Legal Environment of Business	3	BUS 2260	Business Communication I	3
BUS 2400	Management and Organizational Behavior	3	BUS 2353	Principles of Marketing	3
BUS 2802	Business Calculus II	3	BUS 2903	Business Elective	3
ECO 2210	Principles of Microeconomics	3	ECO 2220	Principles of Macroeconomics	3
Total		15			15
Junior			Junior		
ELECTIVE	BUS Elective	3	BUS 2203	Professional Development	2
BUS 3331	Principles of Finance	3	BUS 3370	International Business	3
BUS 2261	Business Communication II	3	FIN 3332	Investments	3
MIS 3371	Information Management	3	ELECTIVE	From List D	3
ELECTIVE	From List D	3	ELECTIVE	From List B, C, or D	3
Total		15			14
Senior			Senior		
BUS 4785	Operations Management	3	BUS 4795	Strategic Management	3
BUS 3510	Business Intelligence	3	ELECTIVE	From List D	3
FIN 3333	Financial Institutions	3	FIN 4431	Financial Management	3
FIN XXXX	Finance Approved Elective	3	FIN XXXX	Finance Approved Elective	3
PHI 2240	From List B	3	ELECTIVE	From List B, C, D	3
Total		15			15

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION -Hospitality Management Concentration–ENG 1100 or ENG 1101 and ENG 1102; MTH 1750; HIS 1110, HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences -6 hours from 2 different disciplines from List C; Natural and Physical Sciences-6 credit hours from List D; USS 1000 and 1 HHP Activity from List A and an additional 9 hours from List B, C or D.

All Hospitality Management students are required to take the following College of Business courses: ACC 2210, ACC 2220, BUS 1100, BUS 1500, BUS 2200, BUS 2203, BUS 2260, BUS 2261, BUS 2343, BUS 2353,BUS 2801, BUS 2802, BUS 2903, BUS 3331, BUS 3370, BUS 3510, BUS 4785, BUS 4795, ECO 2210, ECO 2220 and MIS 3371; Also, Hospitality Management Concentration requirements – select 15 hours from the following courses: HMP 1100 (required), HMP 2211,HMP 2220, HMP 2222, HMP 2250,HMP 3310, HMP 3311,HMP 3330, HMP 3331, HMP 4401, HMP 4402, HMP 4411, HMP 4412, HMP 4418, HMP 4426, HMP 4436, HMP 4439,
MIS 3371 and 3 hours of approved electives. Students are required to earn all C's or better in their major and concentration and also maintain at least a GPA of 2.0 in their degree program.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATIONCONCENTRATION IN HOSPITALITY MANAGEMENT

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Business Administration –Hospitality Management Concentration –120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BUS 1100	Contemporary American Business	3	BUS 1500	Computer Applications for Business	3
ENG 1101	Introduction to Writing for College	4	BUS 2801	Business Calculus I	3
USS 1000	Undergraduate Success Seminar	1	ENG 1102	Writing and Research the Essay	4
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B, C, or D	3
HHP 1XXX	HHP Activity from List A	1	ELECTIVE	From List C	3
MTH 1750	College Algebra	3			
Total		16			16
Sophomore			Sophomore		
ACC 2210	Financial Accounting	3	ACC 2200	Managerial Accounting	3
BUS 2200	Legal Environment of Business	3	BUS 2260	Business Communication I	3
BUS 2400	Management and Organizational Behavior	3	BUS 2353	Principles of Marketing	3
BUS 2802	Business Calculus II	3	BUS 2903	Business Statistics	3
ECO 2210	Principles of Microeconomics	3	ECO 2220	Principles of Macroeconomics	3
Total		15			15
Junior			Junior		
ELECTIVE	BUS Elective	3	BUS 2203	Professional Development	2
BUS 3331	Principles of Finance	3	BUS 3370	International Business	3
BUS 2261	Business Communication II	3	HMP 1100	Intro to Hospitality Management	3
MIS 3371	Information Management	3	ELECTIVE	From List D	3
ELECTIVE	From List D	3	ELECTIVE	From List B, C, or D	3
Total		15			14
Senior			Senior		
BUS 4785	Operations Management	3	BUS 4795	Strategic Management	3
HMP XXXX	HMP Option Requirement	3	BUS 3510	Business Intelligence	3
HMP XXXX	HMP Option Requirement	3	HMP XXXX	HMP Option Requirement	3
ELECTIVE	From List C	3	HMP XXX	HMP Option Requirement	3
PHI 2240	From List B	3	ELECTIVE	From List B, C, or D	3

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION -International Business Concentration–ENG 1100 or ENG 1101 and ENG 1102; MTH 1750; HIS 1110, HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences -6 hours from 2 different disciplines from List C; Natural and Physical Sciences-6 credit hours from List D; USS 1000 and 1 HHP Activity from List A and an additional 9 hours from List B, C or D.

All International Business students are required to take the following College of Business courses: ACC 2210, ACC 2220, BUS 1100, BUS 1500 BUS 2200, BUS 2203, BUS 2260, BUS 2261, BUS 2343, BUS 2353, BUS 2801, BUS 2802, BUS 2903, BUS 3331, BUS 3370, BUS 4785, BUS 4795, ECO 2210, ECO 2220 and MIS 3371; Also, International Business Concentration requirements: ECO 3360, FIN 4437, MGT 4471, MKT 4467, PHI 2230 and 3 hours of approved electives. Students are required to earn all C's or better in their major and concentration and also maintain at least a GPA of 2.0 in their degree program.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATIONCONCENTRATION IN INTERNATIONAL BUSINESS

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Business Administration –International Business Concentration –120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BUS 1100	Contemporary American Business	3	BUS 1500	Computer Applications for Business	3
ENG 1101	Introduction to Writing for College	4	BUS 2801	Business Calculus I	3
USS 1000	Undergraduate Success Seminar	1	ENG 1102	Writing and Research the Essay	4
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B, C, or D	3
HHP 1XXX	HHP Activity from List A	1	ELECTIVE	From List C	3
MTH 1750	College Algebra	3			
Total		16			16
Sophomore			Sophomore		
ACC 2210	Financial Accounting	3	ACC 2200	Managerial Accounting	3
BUS 2200	Legal Environment of Business	3	BUS 2260	Business Communication I	3
BUS 2400	Management and Organizational Behavior	3	BUS 2353	Principles of Marketing	3
BUS 2802	Business Calculus II	3	BUS 2903	Business Elective	3
ECO 2210	Principles of Microeconomics	3	ECO 2220	Principles of Macroeconomics	3
Total		15			15
Junior			Junior		
ELECTIVE	BUS Elective	3	BUS 2203	Professional Development	2
BUS 3331	Principles of Finance	3	BUS 3370	International Business	3
BUS 2261	Business Communication II	3	PHI 2210	From List B	3
MIS 3371	Information Management	3	ELECTIVE	From List D	3
ELECTIVE	From List D	3	ELECTIVE	From List B, C, or D	3
Total		15			14
Senior			Senior		
BUS 4785	Operations Management	3	BUS 4795	Strategic Management	3
ECO 3360	International Economics	3	BUS 3510	Business Intelligence	3
MKT 4467	International Marketing	3	FIN 4437	International Finance	3
ELECTIVE	From List C	3	MGT 4471	Seminar in International MGT	3
PHI 2240	From List B	3	ELECTIVE	From List B, C, or D	3
Total		15			15

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION –Management Concentration

ENG 1100 or ENG 1101 and ENG 1102; MTH 1750; HIS 1110, HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences -6 hours from 2 different disciplines from List C; Natural and Physical Sciences-6 credit hours from List D; USS 1000 and 1 HHP Activity from List A and an additional 9 hours from List B, C or D.

All Management students are required to take the following College of Business courses: ACC 2210, ACC 2220, BUS 1100, BUS 1500, BUS 2200, BUS 2203, BUS 2260, BUS 2261, BUS 2343, BUS 2353, BUS 2801, BUS 2802, BUS 2903, BUS 3331, BUS 3370, BUS 4785, BUS 4795, ECO 2210, ECO 2220 and MIS 3371; Also, Management Concentration requirements: MGT 3380, 3381, MGT 4441, MGT 4460; Management Electives: -choose 3 hours: MGT 4471, MGT 4479, MGT 4497 and 3 hours of approved electives. Students are required to earn all C's or better in their major and concentration and also maintain at least a GPA of 2.0 in their degree program.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION CONCENTRATION IN MANAGEMENT

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Business Administration –Management Concentration –120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BUS 1100	Contemporary American Business	3	BUS 1500	Computer Applications for Business	3
ENG 1101	Introduction to Writing for College	4	BUS 2801	Business Calculus I	3
USS 1000	Undergraduate Success Seminar	1	ENG 1102	Writing and Research the Essay	4
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B, C, or D	3
HHP 1XXX	HHP Activity from List A	1	ELECTIVE	From List C	3
MTH 1750	College Algebra	3			
Total		16			16
Sophomore			Sophomore		
ACC 2210	Financial Accounting	3	ACC 2200	Managerial Accounting	3
BUS 2200	Legal Environment of Business	3	BUS 2260	Business Communication I	3
BUS 2400	Management and Organizational Behavior	3	BUS 2353	Principles of Marketing	3
BUS 2802	Business Calculus II	3	BUS 2903	Business Statistics	3
ECO 2210	Principles of Microeconomics	3	ECO 2220	Principles of Macroeconomics	3
Total		15			15
Junior			Junior		
ELECTIVE	BUS Elective	3	BUS 2203	Professional Development	2
BUS 3331	Principles of Finance	3	BUS 3370	International Business	3
BUS 2261	Business Communication II	3	ELECTIVE	From List D	3
MIS 3371	Information Management	3	ELECTIVE	From List D	3
MGT 3380	Human Resources Management	3	ELECTIVE	From List B, C, or D	3
Total		15			14
Senior			Senior		
BUS 4785	Operations Management	3	BUS 4795	Strategic Management	3
PHI 2240	From List B	3	BUS 3510	Business Intelligence	3
MGT 4460	Small Business Management	3	MGT XXXX	Management Elective	3
MGT 4441	Labor Management Relations	3	MGT 4650	Leadership Theory and Practice	3
ELECTIVE	From List C	3	ELECTIVE	From List B, C or D	3
Total		15			15

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION -Management Information Systems Concentration –ENG 1100 or ENG 1101 and ENG 1102; MTH 1750; HIS 1110, HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences -6 hours from 2 different disciplines from List C; Natural and Physical Sciences-6 credit hours from List D; USS 1000 and 1 HHP Activity from List A and an additional 9 hours from List B, C or D.

All Management Information Systems students are required to take the following College of Business courses: ACC 2210, ACC 2220, BUS 1100, BUS 1500, BUS 2200, BUS 2203, BUS 2260, BUS 2261, BUS 2343, BUS 2353, BUS 2801, BUS 2802, BUS 2903, BUS 3331, BUS 3370, BUS 4785, BUS 4795, ECO 2210, ECO 2220 and MIS 3371; Also, Management Information Systems option requirements: MIS 4461, MIS 4462; Management Information Systems Electives –Choose 6 hours: MIS 4465, 4491, 4497 and 3 hours of approved electives:(MIS 2251, MIS 2252, 2253, MIS 2254 are included.) Students are required to earn all C's or better in their major and concentration and also maintain at least a GPA of 2.0 in their degree program.

CURRICULUM FOR THE DEGREE,

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATIONCONCENTRATION IN MANAGEMENT INFORMATIONSYSTEMS

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree

Minimum hours needed to obtain a Bachelor of Science in Business Administration –Management Information Systems Concentration –120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BUS 1100	Contemporary American Business	3	BUS 1500	Computer Applications for Business	3
ENG 1101	Introduction to Writing for College	4	BUS 2801	Business Calculus I	3
USS 1000	Undergraduate Success Seminar	1	ENG 1102	Writing and Research the Essay	4
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B, C, or D	3
HHP 1XXX	HHP Activity from List A	1	ELECTIVE	From List C	3
MTH 1750	College Algebra	3			
Total		16			16
Sophomore			Sophomore		
ACC 2210	Financial Accounting	3	ACC 2200	Managerial Accounting	3
BUS 2200	Legal Environment of Business	3	BUS 2260	Business Communication I	3
BUS 2400	Management and Org Behavior	3	BUS 2353	Principles of Marketing	3
BUS 2802	Business Calculus II	3	BUS 2903	Business Statistics	3
ECO 2210	Principles of Microeconomics	3	ECO 2220	Principles of Macroeconomics	3
Total		15			15
Junior			Junior		
ELECTIVE	BUS Elective	3	BUS 2203	Professional Development	2
BUS 3331	Principles of Finance	3	BUS 3370	International Business	3
BUS 2261	Business Communication II	3	ELECTIVE	From List D	3
MIS 3371	Information Management	3	MIS XXXX	MIS Approved Elective	3
ELECTIVE	From List D	3	MIS 3372	Bus Program & Information Systems	3
Total		15			14
Senior			Senior		
BUS 4785	Operations Management	3	BUS 4795	Strategic Management	3
PHI 2240	From List B	3	BUS 3510	Business Intelligence	3
MIS 4461	Information Systems Analysis	3	MIS XXXX	MIS Approved Elective	3
PSY 1200	From List C	3	MIS 4462	Syst Design & Database Implementation	3
ELECTIVE	From List B, C, or D	3	ELECTIVE	From List B, C or D	3
Total		15			15

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION –Marketing–ENG 1100 or ENG 1101 and ENG 1102; MTH 1750; HIS 1110, HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences -6 hours from 2 different disciplines from List C; Natural and Physical Sciences-6 credit hours from List D; USS 1000 and 1 HHP Activity from List A and an additional 9 hours from List B, C or D.

All Marketing students are required to take the following College of Business courses: ACC 2010, ACC 2220, BUS 1100, BUS 1500, BUS 2200, BUS 2203, BUS 2260, BUS 2261, BUS 2343, BUS 2801, BUS 2802, BUS 2903, BUS 3331, BUS 3370, BUS 4785, BUS 4795, ECO 2210, ECO 2220, and MIS 3371; Also, Marketing option requirements: MKT 3396, 4451, 4455, 4465. Marketing Electives – choose 3 hours: MKT 3354, 3355, 3395, 4467 and 3 hours of approved electives. Students are required to earn all C's or better in their major and concentration and also maintain at least a GPA of 2.0 in their program.

CURRICULUM FOR THE DEGREE,

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATIONCONCENTRATION IN MARKETING

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Business Administration –Marketing Concentration –120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BUS 1100	Contemporary American Business	3	BUS 1500	Computer Applications for Business	3
ENG 1101	Introduction to Writing for College	4	BUS 2801	Business Calculus I	3
USS 1000	Undergraduate Success Seminar	1	ENG 1102	Writing and Research the Essay	4
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B, C, or D	3
HHP 1XXX	HHP Activity from List A	1	ELECTIVE	From List C	3
MTH 1750	College Algebra	3			
Total		16			16
Sophomore			Sophomore		
ACC 2210	Financial Accounting	3	ACC 2200	Managerial Accounting	3
BUS 2200	Legal Environment of Business	3	BUS 2260	Business Communication I	3
BUS 2400	Management and Org Behavior	3	BUS 2353	Principles of Marketing	3
BUS 2802	Business Calculus II	3	BUS 2903	Business Statistics	3
ECO 2210	Principles of Microeconomics	3	ECO 2220	Principles of Macroeconomics	3
Total		15			15
Junior			Junior		
ELECTIVE	BUS Elective	3	BUS 2203	Professional Development	2
BUS 3331	Principles of Finance	3	BUS 3370	International Business	3
BUS 2261	Business Communication II	3	ELECTIVE	From List B, C or D	3
MIS 3371	Information Management	3	MKT 3390	Retail Merchandising	3
ELECTIVE	From List D	3	ELECTIVE	From List D	3
Total		15			14
Senior			Senior		
BUS 4785	Operations Management	3	BUS 4795	Strategic Management	3
PHI 2240	From List B	3	BUS 3510	Business Intelligence	3
MKT 3396	Consumer Behavior	3	MKT 4455	Marketing Research	3
MKT 4451	Advertising	3	MKT XXXX	Marketing Elective	3
ELECTIVE	From List B, C, or D	3	ELECTIVE	From List B, C or D	3
Total		15			15

MASTER OF BUSINESS ADMINISTRATION

The Master of Business Administration is composed of thirty-six (36) credit hours. The degree is intended for students with an undergraduate business degree and students with a non-business undergraduate degree. Students that complete the program will have a broad knowledge in management and technology, strategic thinking, and managing teams. Students will also have core skills in marketing, accounting, and finance. The degree will prepare students to enter professional careers or complete advanced studies through rigorous academic preparation, robust

mentorship, enrichment opportunities, and service-learning. The program includes coursework in managerial accounting; organizational behavior; quantitative methods for managers; business ethics; international business; leadership; supply chain and corporate logistics; fundamentals of project management; project implementation; and investments. The program concludes with a capstone course in advanced project management practices.

CAREER PROSPECTS

The objective of this program is to prepare graduate students from diverse backgrounds, to acquire a broad range of knowledge and skills essential for successful managerial and leadership positions in industry and government. Through case study analysis, simulations, class discussions, hands-on exercises, group projects, and more, students will gain and develop essential managerial and leadership competencies that apply to any industry, including government, insurance, research, education, banking, manufacturing, retail, transportation,

and others.

ADMISSION CRITERIA

Applicants seeking admission in the MBA program must meet the following criteria:

1. A bachelor's degree from regionally accredited institution with cumulative GPA 3.0.
    a. Official transcripts must be submitted.
2. Letter of intent: applicants must submit an essay that describes their personal and professional accomplishments, and how these relate to their career goals, as well as any other pertinent information that would help in the review process.
3. Candidates without bachelor's degrees in Business must complete the Prerequisites for applicants without business degree which requires 18 hours in the Common Professional Components (CPC).
4. Applicants transferring from another graduate program must have taken the courses within the previous seven years to be eligible. The transcript must also reflect a 3.00 grade point average.
5. Submission of a current resume.
6. Submission of two letters of recommendations, with at least one being from an academic source.
    a. Letters of recommendation must be of either professional or academic experience.

CONDITIONAL ADMISSION

An applicant with a cumulative GPA between 2.50 and 2.99 can be admitted into the program on a conditional basis. The applicant must complete additional requirements given below:

1. Submit GMAT minimum score of 450 (or GRE equivalent)
2. To modify conditional admissions, students must earn a minimum GPA of 3.0 after completing 9 credit hours of MBA coursework.

NON-DEGREE SEEKING STATUS

Students who hold bachelor's degrees with a minimum GPA of 3.0 and who wish to take graduate course, without a qualifying degree, can be admitted as a Non-Degree seeking student. Those who wish to take graduate courses to satisfy degree requirements at another institution may qualify for this status. Students must meet all course prerequisites in order to be admitted to advanced courses.

PROVIOSIONAL ADMISSION

Applicants who submitted unofficial documentation of test scores, transcripts, or lack of letter(s) of recommendation may be admitted provisionally. An undergraduate student who applies for MBA program pending bachelor's degree completion also fall is this category for admission. Once official documents are submitted, status will change from pending to regular or conditional admission. A student cannot be under this status for more than 2 terms (one semester).

INTERNATIONAL STUDENTS

All international students need to complete following items:

1. TOEFL or IELTS score is required for international students. Applicants must have at least TOEFL score of 79 (internet-based test) or a minimum score of 6.0 on the IELTS.

2. Submit evaluated transcript via World Education Service (WES).

TRANSFER OF CREDIT

The MBA program at Central State University accepts graduate transfer credits from universities accredited by regional accrediting associations. The university registrar will determine whether the Central State University accepts credit from other institutions. The maximum number of graduate credits that an applicant can transfer is 12 semester hours. Once the credits are approved by the university registrar, the credits will be articulated by the MBA coordinator or the dean of the dean of the College of Business.

MASTER OF BUSINESS ADMINISTRATION –General Degree option–The following core requirements: MBA 5100, MBA 5110, MBA 5120, MBA 5130, MBA 5140, MBA 5150, MBA 5160, and MBA 5170. 9 credit hours of specialization requirements: MBA 6100, MBA 6110, MBA 6120, MBA 6130 and 3 credit hours of Capstone course: MBA 6500. Students are required to maintain at least a GPA of 3.0 in their degree program.

CURRICULUM FOR THE DEGREE, MASTER OF BUSINESS ADMINISTRATION

General Management Degree Option. The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Master of Business Administration – 36

FALL SEMESTER					
Course #	Title	Credit	Course #	Title	Credit
MBA 5100	Managerial Accounting	3	MBA 5130	Marketing Management	3
MBA 5120	Organizational Behavior	3	MBA 5110	Corporate Finance	3
MBA	Specialization Course	3	MBA	Specialization Course	3
Total		9			9
SPRING SEMESTER					
MBA 5140	Quantitative Methods for Managers	3	MBA 5150	Corporate Economic Decision Making	3
MBA 5160	Business Ethics	3	MBA 5170	Management Information Systems	3
MBA	Specialization Course	3	MBA 6500	Strategic Management Capstone	3
Total		9			9

MASTER OF BUSINESS ADMINISTRATION –Project Management option–The following core requirements: MBA 5100, MBA 5110, MBA 5120, MBA 5130, MBA 5140, MBA 5150, MBA 5160, and MBA 5170. 9 credit hours of specialization requirements: MBA 6200, MBA 6210, MBA 6220, and 3 credit hours of Capstone course: MBA 6500. Students are required to maintain at least a GPA of 3.0 in their degree program.

CURRICULUM FOR THE DEGREE, MASTER OF BUSINESS ADMINISTRATION

Project Management Degree Option. The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Master of Business Administration – 36

FALL SEMESTER					
Course #	Title	Credit	Course #	Title	Credit
MBA 5100	Managerial Accounting	3	MBA 5130	Marketing Management	3
MBA 5120	Organizational Behavior	3	MBA 5110	Corporate Finance	3
MBA 6200	Fundamentals of Project Management	3	MBA 6210	Project Initiation & Selection	3
Total		9			9
SPRING SEMESTER					
MBA 5140	Quantitative Methods for Managers	3	MBA 51050	Corporate Economic Decision Making	3
MBA 5160	Business Ethics	3	MBA 5170	Management Information Systems	3
MBA 6220	Project Implementation	3	MBA 6510	Advanced Project Management Practicum/Capstone	3
Total		9			9

ACADEMIC STANDING POLICY

General Policy

Graduate students are expected to maintain at least a cumulative grade point average of 3.0 throughout the program. Additionally, a grade point average of 3.00 is required for graduation from any of the graduate programs in the College of Business. Students may use only one grade of "C" or three semesters credit hours toward graduation. Any grade of "D" received in a graduate course must be repeated and many not be used toward any graduate degree in the College of Business.

Probationary Status

If student falls below the 3.00 grade point average, the student will be placed in a probationary status. While on probation, students must meet the following criteria to remain in the program:

- The student must work with their academic advisor to ensure success,
- The student will work closely with faculty members and utilize office hours for additional support,
- The student must earn a 3.0 grade point average during the probationary period,
- The probationary period will last one full semester and the student will successfully complete at least 6 credit hours during the semester in which the probationary period occurs.

Academic Misconduct

All cases of academic dishonesty or misconduct will be reviewed by the MBA Committee. The MBA Committee will determine if the offense rises to the level of suspension or dismissal from the program.

COLLEGE OF HUMANITIES, ARTS, SOCIAL SCIENCES, and EDUCATION

Dr. Lillian Drakeford, Dean

The College of Humanities, Arts, Social Sciences, and Education (CHASE) provides students with a strong liberal arts foundation for careers, advanced academic study, and responsible citizenship in a global community.

The College of Humanities, Arts, Social Sciences, and Education is organized through four academic departments of Communication and Visual Arts, Health and Social Sciences, Humanities, and Professional Education and Music. The College also houses the Stokes Center on Aging, Honors Program, federal and state-funded research programs, and the Mass Communications Center. The Music and Art programs have been designated as Centers of Excellence by the Ohio Board of Regents.

The College offers twenty-six-degree programs in the fine and performing arts, humanities, social and behavioral sciences, and education. Undergraduate degree offerings include Journalism and Digital Media, English, Fine Arts, Humanities, and Music. Through the disciplines of Criminal Justice, Political Science, Psychology, Social Work and Sociology, the College offers baccalaureate degree programs that prepare students for careers in the pure and applied sciences. The Department of Professional Education and Music offers licensure degree programs to earn an Ohio teacher license, and a non-licensure Educational Studies. In addition, the College offers two certificates in Diversity, Equity, and Inclusion, and Women in Contemporary Society. The programs in International Languages, Gerontology, Africana Studies, and Philosophy support major and minor degree offerings, and the University General Education Requirements.

Course offerings in the College also significantly support the General Education program to provide students with a broad foundation in the liberal arts. The guiding principle of General Education is that each person who graduates from college should possess the ability to think carefully and analytically, to communicate information and ideas effectively, to know history and its role in shaping the present, to use technology to enhance learning, and to understand human life more deeply and productively through acquaintance with the work of writers, thinkers, and pioneers in the arts, humanities, and social sciences.

ACCREDITATION

The Education Preparation Program is accredited by the Council for Accreditation of Educator Preparation (CAEP) and approved by the Ohio Department of Higher Education. The Music and Art programs are accredited by the National Association of Schools of Music and the National Association of Schools of Art and Design respectively. The Social Work program is accredited by the Council on Social Work Education.

STUDENT RESPONSIBILITY

Students in the College of Humanities, Arts, Social Sciences, and Education are required to confer with an assigned faculty advisor within their major, or a professional advisor e.g. TEAP-C advisor, MOSAIC (online) advisor or a professional advisor in First- and Second-Year Student Success on a regular basis, as appropriate. Students are personally responsible not only for selecting their academic programs, but also for adhering to all published regulations and requirements of the University. Students are expected to seek regular academic advisement and are individually responsible for completing all degree requirements.

During the semester immediately prior to the year in which a student expects to graduate, he or she must confer with his or her advisor and have a degree audit completed by the Office of the Registrar.

PRE-LAW OPTIONS

Students interested in law school may major in English-PreLaw or Political Science, or minor in pre-law. These options are designed for students who wish to pursue any career related to law. Aside from a career as an attorney-at-law, such careers might include public policy, government leadership, criminal justice, education, and related fields.

DEPARTMENT OF COMMUNICATIONS AND VISUAL ARTS

The Department of Communications and Visual Arts houses four academic programs: Journalism and Digital Media, English Composition and Creative Writing, International Languages and Cultures, and Visual Arts.

The Department offers four degrees: a B.A. in Journalism and Digital Media, a B.A. in Studio Arts, a B.A. in Art (Graphic Design), and minors in Creative Writing, French, International Languages and Cultures, Journalism and Digital Media, Public Relations, and Spanish. It also offers general education courses in English composition (required of all students), art, public speaking, and social media. The B.S. in Arts Education is currently not enrolling students.

Course offerings are aligned with the University's four institutional learning outcomes: effective communication, critical thinking, understanding and appreciation of diversity in social and cultural values, and understanding and application of quantitative reasoning and the scientific process.

CAREER OPPORTUNITIES

Students who take courses in the Communications and Visual Arts develop highly sought job skills. These skills include the ability to communicate orally and through the written word, conduct research, navigate cultural differences, and design and analyze visual images.

Employers value communication skills because they help companies operate efficiently, minimize misunderstandings, improve training, and reach new customers.

Employers value research skills because they help companies develop products and/or services, identify the needs of customers, improve their performance, keep up with changes in the industry, and compete in the marketplace.

Employers value cultural awareness and understanding because they help companies serve an increasingly diverse base of customers. Bilingual and multilingual employees are especially valued.

STUDENT RESPONSIBILITIES

Students in the CVA Department are required to attend class regularly, submit work assignments, meet deadlines, and study. They are encouraged to participate in co-curricular and pre-professional activities. They are expected to meet regularly with their academic advisor and with faculty members during office hours.

Faculty members are able, willing, and eager to assist students. However, the student is ultimately responsible for understanding and completing the requirements of the student's degree program.

PROGRAMS

JOURNALISM & DIGITAL MEDIA

The Journalism and Digital Media Program offers a B.A. in Journalism and Digital Media.
Program Objective: The JDM program prepares students for careers in journalism, as well as allied fields such as marketing, public relations, social media, and more. It provides in-depth training, useful in all fields, in oral and written communication.

Course Offerings: The program offers a mix of lecture and production courses to give students an understanding of the field and students a foundation of knowledge within the field, as well as relevant technical skills.

Degree requirements: Students must complete the University's general education curriculum and the specific requirements of the Journalism and Digital Media major.

Students must also

1. Earn at least 120 academic credits.
2. Complete a minimum of 120 hours toward graduation.
3. Complete at least nine semester hours of additional humanities, exclusive of the history requirement in the general education curriculum.
4. Complete a practicum and an off-campus internship.
5. Earn a "C" grade or better in their communication and digital media courses.
6. Attain a cumulative grade point average of at least 2.5 in the major.

ENGLISH COMPOSITION

The English Composition Program offers a curriculum of writing courses to support the University's general education curriculum, as well as a minor in creative writing.

Program Objective: The English Composition program prepares students for work in a wide variety of fields. It provides in-depth training in writing, composition, and research.

Course Offerings: The program offers introductory and advanced writing courses, as well as courses in creative writing.

INTERNATIONAL LANGUAGES AND CULTURES

The International Languages and Cultures program offers courses in a wide range of international languages to support the University's general education program. It also offers Minors in Spanish, French, and International Languages and Cultures.

Program Objective: The ILC program gives students the opportunity to broaden their experience through the study of international languages and cultures. It offers professional training to students majoring in areas that utilize international language skills.

Course Offerings: The ILC program offers beginning and intermediate courses in Spanish, French, Arabic, Swahili, and other languages depending on demand. These courses focus on beginning language structure, vocabulary development, reading, writing, translation skills, and conversation. The program also offers a variety of upper-level culture, cinema, and literature courses. Students expecting to use an international language in their careers are strongly urged to participate in a study abroad program to develop their linguistic and culture skills and knowledge.

ART and DESIGN

The art and design programs are designed to produce graduates who are thoughtful, articulate, and literate artist scholars, who possess a broad liberal arts background and the skills necessary to compete in a technologically sophisticated world. The curriculum is constructed to meet the individual needs of students (who may have unique and diverse career aspirations) and is designed to enable each student to acquire a broad range of aesthetic experiences (both in and out of the classroom). Small class sizes allow the necessary one-to-one contact with instructors to develop creative thoughts into strong visual statements. Central State University is an accredited institutional member of the National Association of Schools of Art and Design.

SPECIAL REQUIREMENTS FOR ART and DESIGN MAJORS

All art and design majors must meet the following requirements:

- Upon entering the department, each major is required to meet with an art faculty advisor to determine a course of study.
- Students majoring in art/design are required to exhibit selected works in student exhibitions organized by the department.
- The department reserves the right to retain, for its student collection, one example of each student's work done in any scheduled class.
- Students must participate in a senior art exhibition as partial fulfillment of department requirements.
- The student enrolled in the Bachelor of Arts in any Arts degree program is required to take the core program first.
- Students are required to complete sophomore reviews, for entrance into their respective programs.
- After students have completed the core program they begin, usually in their third year, concentrated work in a major area of study. A student may elect to focus in one of three areas of study: Art (Graphic Design), Painting or Drawing, or Art Education.

BACHELOR OF ARTS IN Journalism and Digital Media - Students in the Journalism and Digital Media Program must take the following general education requirements: ENG 1100 or 1101, 1102; MTH 1550, HIS 1110 or HIS 1121 or HIS 1122; USS 1000, six (6) semesters hours from Social and Behavioral Sciences; seven (7) credit hours from Natural and Physical Sciences (must include a lab), nine (9) Humanities elective credits, and eight (8) credits of an international language.

Students must complete the following Journalism and Digital Media Courses: COM 2200, COM 2214, COM 2219, COM 2230, COM 2272, COM 3300, COM 3306, COM 3315, COM 3319, COM 3330, COM 3400, COM 3894, COM 4447, COM 4895, COM
4896, and one (1) three-hour COM elective.

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS IN JOURNALISM AND DIGITAL MEDIA

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Arts in Journalism and Digital Media - 120

*All JDM majors must take at least 19-20 hours of electives, Including at least 15 hours outside the Journalism and Digital Media program.

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1100 or ENG 1101	Intro to Writing and Reading (or) Intro to Writing for College	4 or 5	ENG 1102	Writing and Research the Essay	4
ILC 1XXX	International Language I	4	ILC 1XXX	International Language II	4
USS 1000	Undergraduate Student Success	2	ELECTIVE	From List B	3
MTH 1550	Modern Applications of Math	3	COM 2230	Professional Development	1
HHP 1XXX	HHP Activity	1	ELECTIVE	From List B	3
Total		14/15			15
Sophomore			Sophomore		
COM 2200	Intro Mass Communication	3	COM 2219	Intro to Media Writing	3
COM 2214	Public Speaking	3	COM 2272	Principles of Electronic Media	3
HIS XXXX	1110/1121/1122	3	ELECTIVE	Digital Media - List A	3
ELECTIVE	From List B	3	ELECTIVE	From List C	3
ELECTIVE	From List C	3	ELECTIVE	From List D	4
Total		15			16
Junior			Junior		
ELECTIVE	Digital List - List A	3	COM 3306	Communication Research Methods	3
ELECTIVE	Digital List - List A	3	COM 3400	Broadcast Media Production: TV	3
COM 3300	Broadcast Media Prod: Radio	3	COM 3894	Radio or WCSU-TV	1
ELECTIVE	From List D	4	ELECTIVE	Digital Media - List A	3
COM 3319	Reporting	3	ELECTIVE		3
			ELECTIVE		2

Total		16			15
Senior			Senior		
COM 4896	Internship	3	COM 3315	Writing for Electronic Media	3
COM XXXX	COM Elective	3	COM 4895	Portfolio and Capstone	3
ELECTIVE		3	COM 4447	Media Law and Ethics	3
ELECTIVE		3	ELECTIVE		3
ELECTIVE		3	ELECTIVE		3
Total		15			15

BACHELOR OF ARTS IN STUDIO ARTS - Students in the studio arts - drawing and painting concentration program must take the following general education requirements (43 credit hours) (25-26 hours): ENG 1100 or ENG 1101, ENG 1102; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122; HHP Activity; USS 1000, 6
additional credit hours in Humanities in 2 disciplines; 6 credit hours from Social and Behavioral Sciences in 2 disciplines; 6 credit hours from Natural and Physical Sciences in 2 disciplines; USS 1000; 1 credit hour HHP Activity; and 8 credit hours of foreign language.

All students must take the following major requirements: (See ACADEMIC PROGRAM) including special requirements for the B.A. (6 additional semester hours in humanities and 8 credits of foreign language), and the following major requirements: ART 1001, ART 1002, ART 1101, ART 1102, ART 1200, ART 1210, ART 1301, ART 1302, ART 2010, ART 2020,
ART 2100, ART 2200, ART 2400, ART 2500, ART 3065, ART 3100, ART 2020, ART 3065ART 3200, ART 3300, ART 4200,
ART 4400 ART 4751, ART 4752; and 12credits from the following: ART 1110, ART 1120, ART 2130, ART 2140, ART 3150,
ART 3160.

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS MAJOR IN STUDIO ART

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Arts in Studio Arts - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ART 1001	Fundamentals & Design I	3	ART 1002	Fundamentals & Design II	3
ART 1101	Beginning Drawing I	3	ART 1102	Beginning Drawing II	3
ART 1301	Beginning Painting I	3	ART 1200	Introduction to Photography	3
ENG 1100	Intro to Writing and Reading for College	4	ART 1210	Intro to Art	3
USS 1000	Undergraduate Success Seminar	2	ART 1302	Beginning Painting II	3
			HHP 1XXX	HHP Activity	1
Total		15			16
Sophomore			Sophomore		
ART ####	Art History Elective	3	ART ####	Art History Elective	3
ART 2200	Figure Drawing & Painting I	3	ART 2400	Beginning Ceramics	3
HIS XXXX	1110/1121/1122	3	ART 2100	Figure Drawing and Sculpture	3
ENG 1101	Intro to Writing for College	4	MTH 1550	Modern Applications of Math	3
ART 2010	Intro to 2D Computer Art	3	ENG 1102	Writing & Researching Essay	3
Total		16			15
Junior			Junior		
ART 3100	Advanced Drawing	3	ART 2020	Image Processing	3
ART 3200	Figure Drawing and Painting II	4	ILC 1XXXX	International Languages	4

ILC 1XXX	International Languages	4	ELECTIVE	From List C	3
ELECTIVE	From List D	4	ELECTIVE	From List B	3
ELECTIVE	From List C	3			
Total		18			13

BACHELOR OF ARTS IN ART (GRAPHIC DESIGN) - Students in the graphic design program must take the following general education requirements (43 credit hours): ENG 1100 or ENG 1101, ENG 1102; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122; 6 additional credit hours in Humanities in 2 disciplines; 6 credit hours from Social and Behavioral Sciences in 2 disciplines; 6 credit hours from Natural and Physical Sciences in 2 disciplines; USS 1000; 1 credit hour HHP Activity; and 8 credit hours of foreign language. All students must take the following major requirements: (See ACADEMIC PROGRAM) including special requirements for the B.A. (six additional semester hours in humanities and ten credits of foreign language), and the following major requirements: ART 1001, 1002, 1101, 1102, 1200, 1210, 2100, 2200, 2400, 3100, 4751, 4751 and 4752; ART 2010, 2020, 3061, 3062, 3065,3070, 4061, 4062, and twelve credits from the following: ART 1100, 1110, 1120, 1300 2130, 2140, 3150, 3160.

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS IN ART (GRAPHIC DESIGN)

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Arts in Graphic Design -120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ART 1001	Fundamentals & Design I	3	ART 1002	Fundamentals & Design II	3
ART 1101	Beginning Drawing I	3	ART 1102	Beginning Drawing II	3
ART 1210	Introduction to Art	3	ART 1200	Introduction to Photography	3
ENG 1101	Intro to Writing for College	4	ART 2010	Intro to 2D Computer Graphics	3
USS 1000	Undergraduate Success Seminar	2	ENG 1102	Writing and Research the Essay	4
Total		15			16
Sophomore			Sophomore		
ART ####	Art History Elective	3	ART ####	Art History Elective	3
ART 2020	Image Processing for Artists	3	ART ####	Art History Elective	3
ART 2400	Introduction to Ceramics	3	HIS XXXX	1110/1121/1122	3
ELECTIVE	From List C	3	MTH 1550	Modern Applications of Math	3
HHP1XXXX	HHP Activity	1	Art 2200	Figurative Drawing and Painting	3
Total		13			15
Junior			Junior		
ART ####	Art History Elective	3	Art 2100	Figurative Drawing and Sculpture	3
ART 3100	Advanced Drawing	3	ART 3062	Graphic Design II	3

ART 3061	Graphic Design I	3	ART 3065	Intro to Illustration	3
ILC 1XXXX	International Languages	4	ELECTIVE	From List B	3
ELECTIVE	From List D	3	ILC 1XXXX	International Languages	4
Total		16			16
Senior			Senior		
ART 4061	Advanced Graphic Design	3	ART 3070	Web Design and Development 1	3
ELECTIVE	From List C	3	ART 4062	Advanced Graphic Design II	3
ELECTIVE	From List D	3	ELECTIVE	Electives	3
ELECTIVE	Electives	6	ELECTIVE	From List B	3
ART 4751	Senior Art Show I	1	ART 4751	Senior Art Show II	1
Total		16			13

DEPARTMENT OF HEALTH AND SOCIAL SCIENCES

The Department of Health and Social Sciences offers major concentrations in the disciplines of criminal justice, (recreation) health and human performance, political science, psychology, social work, and sociology, and minor concentrations in criminal justice, gerontology, political science, psychology, and sociology. In addition to the offerings for students whose major or minor interest is in the social sciences, the department provides general education courses and service to other departments (e.g., communications, secondary education, and health and recreation).

The department offers programs leading to the following degrees: Bachelor of Arts in Political Science, Political Science (Public Administration), Psychology, Social Work, and Sociology; Bachelor of Science in Criminal Justice, Psychology, Social Work, or Sociology. All majors in the department must fulfill the stipulated General Education Requirements and the specific requirements of the College of Humanities, Arts, Social Sciences, and Education as well as any special requirements for the Bachelor of Arts or Bachelor of Science degrees.

CRIMINAL JUSTICE

The Criminal Justice program provides an overview of the criminal justice system, the causes of crime and issues relating to social control. The major is structured around a core of criminal justice courses that include topics in law enforcement, the judicial process and correctional system. The course of study consists of a general overview of the components of the criminal justice system.

Within the major, students may choose to emphasize one of three areas. The law enforcement emphasis is designed primarily for students who wish to become local, state, or federal law enforcement officers (e.g., city police officers, state highway patrol officers or Federal Bureau of Investigation agents). The judicial emphasis is for those students who wish to continue their education in law school or other areas of this branch of the criminal justice system (e.g., victim advocate, pretrial investigator, etc.). Finally, the corrections emphasis is best suited for students who wish to work in a correctional setting for juveniles or adults (e.g., correctional caseworker, correctional officer, drug counselor, parole officer or probation officer). Students must make a "C" or better in all criminal justice courses and in SOC 2206 and SOC 3333.

HEALTH AND HUMAN PERFORMANCE

The Health and Human Performance program offers courses that prepares students for professional careers in the recreation and leisure industry. The program has established clinical sites through partnerships with area community agencies and organizations that provide recreational services for the general population, such as the YMCA/YWCA, Boys/Girls Clubs of America, Community Recreation Centers/Fitness centers, Local, State and National Park systems.

The Health and Human Performance program leads to the Bachelor of Science Degree in Recreation that prepare students for professional careers that require completion of courses in leadership, programming, organization, and administration. Students in this program, are placed with a recreation agency that requires 15 weeks, full-term or 400 hours of Clinical Experience through a Field Experience with an appropriate agency.

Students in the Health and Human Performance Program are required to meet regularly with their advisor. Students are required to comply with all regulations stipulated by the University and the Department of Health and Human Performance. Though expected to seek academic advisement and guidance, students are ultimately responsible for satisfying all the degree requirements. Students, in consultation with their advisor, must submit an application for graduation at a time stipulated by the Department and the University.

POLITICAL SCIENCE
The Political Science program offers a Bachelor of Arts in Political Science and a Bachelor of Arts in Political Science (Public Administration). The discipline offers a broad range of courses that permit specialization in American government and politics, international politics and comparative politics, or public administration. Individual programs combining the required 33 credit hours of political science courses with related courses from other disciplines allow students to prepare for different careers. The BA in Political Science is a traditional preparation for law school. The option in Public Administration combines general knowledge, administrative concepts, and skills courses in a curriculum designed to prepare students for careers in public agencies.

The political science faculty supports the development of a sound liberal arts foundation and appropriate pre -professional skills for all majors. Courses are designed to further understanding of the institutions and processes of government and the behavior of decision-makers, to promote awareness of the perennial questions of political inquiry and the concepts useful in responding to them; and to develop analytical skills.

As a discipline, Political Science is divided into areas of study based on subject matter. At CSU, political science courses are placed in the following groupings: American National Government and Political Theory (PSC 1100, PSC 2223, PSC 3304, 3351, PSC 3353, PSC 3361, PSC 3362, PSC 3365, PSC 3381); Public Administration (PSC 1120, PSC 3310, PSC 3390, PSC 4403, PSC 4493); and Comparative Politics and International Relations (PSC 2202, PSC 2205, PSC 2405, PSC 3311, PSC 3371). Students are to use these groupings to select their three areas of study.

PSYCHOLOGY
The Psychology program is designed to provide students with a broad knowledge of the field of psychology. In addition to ensuring the development of professional skills, the program prepares students for graduate study in psychology or other academic disciplines and employment in the fields of mental health, social services, criminal justice, gerontology, education, and related areas and industry. Courses are offered for both majors and non majors. Extensive use of speakers and extracurricular activities allow students to explore a wide range of views of issues related to the field of psychology.

The faculty possesses diverse professional expertise in psychology, is involved in research and pursues working relationships with other professional institutions. Students also have the opportunity for experiential learning through field experience and research projects. In collaboration with the University's Career Services, the department provides field placement opportunities for practical experience in various agencies and organizations. Research opportunities are available through independent study with faculty or conducting research projects on the student's topic of choice.

SOCIAL WORK
The primary objective of the social work curriculum is to prepare students for entry-level professional practice. Students are provided opportunities for the study and development of generalist knowledge of social work, skills, values, and ethics required of professional social workers.

The content courses, along with field practicum, are designed to provide students with a broad and comprehensive theoretical knowledge base integrated with practical experience. Graduates of the program may seek beginning level social work employment or pursue graduate study. Students who plan to major in social work may take the introductory courses and are considered pre-social work students until they are formally accepted into the program. Transfer students must meet with a social work adviser to determine acceptable transfer courses for the social work major.

The major in social work consists of 49 credit hours. Students must complete a formal application to the program at the end of their freshman year and after the completion of SWK 1100, SWK 2200, ENG 1102, and MTH 1550 with a grade of "C" or above and have completed 30 semester hours. To be accepted into the program, students must have a cumulative grade point average of 2.0. Students must have a cumulative grade point average of
2.0 or better to graduate with a degree in social work. Students who fail to earn a "C" or better in all social work courses must repeat these courses.

The social work practicum consists of one semester and is designed to provide students with appropriate practice experiences to ensure their professional development. Students must complete a formal application for the field education courses, SWK 4595 and SWK 4596. The social work faculty will determine students' readiness for the field practicum courses. Applications for the Social Work Program are located in room 311, Wesley Hall. The applications are reviewed by the social work faculty and students may also be interviewed prior to final decisions. Course offerings and program policies regarding requirements for majors are subject to continuous review and may be changed.

SOCIOLOGY AND GERONTOLOGY

The area offers a Bachelor of Arts or a Bachelor of Science in Sociology and minors in Sociology and Gerontology. The courses are diverse and represent a broad range of practical and theoretical issues in the discipline. Opportunities exist for students to engage in research under the supervision of faculty members.

Faculty members work with students on an individual basis, providing them with counseling, research suggestions and other assistance. They are determined to develop and maintain an academically nurturing relationship with each student in the program.

Employment opportunities are available to students with a major in Sociology and a minor in Criminal Justice, Business Administration, or Gerontology. Courses have been designed to allow students to acquire skills for careers in the criminal justice system or in agencies working with youth, the elderly, and families.

CRIMINAL JUSTICE AND SOCIOLOGY INTERNSHIPS

Internships provide opportunities for students to obtain practical training off campus. Students should work out details for obtaining placement with their academic advisor.

Internships will be recommended only for students who have achieved at least junior status and have an overall grade point average of at least 2.5. The maximum number of credit hours a student may earn for an internship is 8, during two separate semesters. However, for Sociology students, no more than 4 credit hours may be used to fulfill the requirement for the major. For each credit hour earned, the student is expected to spend approximately 3 hours per week on the internship site. Criteria such as student attitude, ability to work with others, classification, and the minimum GPA will be used to select the most qualified students. **Students should apply for an internship the semester prior to taking this course.**

BACHELOR OF SCIENCE IN CRIMINAL JUSTICE - ENG 1100 or ENG 1101 and ENG 1102; MTH 1550; USS 1000; HIS 1110 or

HIS 1121 or HIS 1122 plus 3 Humanities credit hours (Critical Thinking is required) - Social and Behavioral Sciences - 6 hours from two different disciplines from List C; Natural and Physical Sciences (7 credit hours from two different disciplines from List D; one choice must include a lab.); Computer Skills (2-4 credit hours) from List A; 1 HHP Activity from List E.

A minimum of 50 credit hours to include the following courses: CRJ 2210, CRJ 2310, CRJ 2330, CRJ 2410, CRJ 3310, CRJ 3340, CRJ 4655, CRJ 4895; SOC 2206, SOC 3333, and 15 hours in general criminal justice, which are selected in consultation with the academic advisor. Criminal Justice majors will also have to complete PHI 2240, PSY 1200 and SOC 1105; these courses may also be counted toward the completion of other University requirements. An additional 38 credit hours in general electives are required for the 124 hours required for the degree. Criminal Justice majors must repeat all required criminal justice and sociology courses in which a grade of "D" or "F" is received.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN CRIMINAL JUSTICE

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Criminal Justice - 120

*PHI 2240 **will** satisfy General Education List A

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
MTH 1550	Modern Applications of Math	3	ENG 1102	Writing and Research the Essay	4
CRJ 2210	Introduction to Criminal Justice	3	HHP 1XXX	HHP Activity	1
ENG 1101	Introduction to Writing for College	4	PSY 1200	Introduction to Psychology	3
SoC 1105	Introduction to Sociology	3	ELECTIVE	From List D	4
USS 1000	Undergraduate Success Seminar	2	ELECTIVE	Electives	3
Total		15			15
Sophomore			Sophomore		
PHI 2240*	Critical Thinking	3	CRJ 2310	Corrections in America	3
HIS XXXX	1110/1121/1122	3	CRJ 2330	Police and Society	3
SoC 2206	Social Statistics	4	CRJ 2410	Research in CRJ	4
SoC 3333	Criminology	3	ELECTIVE	CRJ General Electives	6
ELECTIVE	CRJ General Electives	3			
Total		16			16
Junior			Junior		
CRJ 3310	Criminal Procedures	3	CRJ 3340	Criminal Law	3
ELECTIVE	CRJ Electives	3	ELECTIVE	CRJ Electives	3
ELECTIVE	From List C	3-4	ELECTIVE	From List C (NoT PSY/SoC)	6
ELECTIVE	From List C	3	ELECTIVE	From List D	3
ELECTIVE	From List C	3			
Total		15-16			15
Senior			Senior		

ELECTIVE	CRJ Elective	6	CRJ 4655	Juvenile Justice	3
ELECTIVE	General Education Elective	3	CRJ 4895	Senior Capstone	3
ELECTIVE	University Elective	6	ELECTIVE	CRJ Elective	3
			ELECTIVE	University Elective	3
Total		15			12

BACHELOR OF SCIENCE IN RECREATION - ENG 1100 or ENG 1101 and ENG 1102; MTH 1750, or MTH 1550; HIS 1110, HIS 1121 or
1122 plus 3
Humanities credit hours from List B; Health and Social Sciences - 9 hours from 2 different disciplines from List C; Natural and Physical Sciences- 7 credit hours from 2 different disciplines from List D (NOTE: one choice must include a lab); USS 1000; HHP 1000 and 1 HHP Activity from List E.
The following major requirements are listed for Recreation: HHP 1110, 1130, 1131, 1132, 1133, 2222, 2230, 2243, 2255, 3312, 3317, 3318, 3320, 3322, 3355, 3361, 4455, 4463, 4470, 4471, 4472, 4486, 4490; ART 2400, BUS 2200, MUS 2215, PSC 1120, SOC 2230. NOTE: Grade of C or better in all major courses and overall grade point average of a 2.5 must be maintained in order to do the Field Experience, HHP 4490. NOTE: BUS 2203, HP 3335, HHP 3362, and HMP 1100 are recommended as electives as well as any course from List B - Humanities or List C - Social Sciences.

CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE IN RECREATION

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1100 or ENG 1101	Intro to Writing/Reading or Intro to Writing for College	5/4	ENG 1102	Writing/Researching the Essay	4
MTH 1550 or MTH 1750		3	ELECTIVE	Elective	3
HIS 1XXX	1100, 1121 or 1122	3	HHP 1000	Health and Wellness	2
HHP 1130	Introduction to HHP	2	HHP 1131	Skills I (Gymnastics & Dance)	2
ELECTIVE	From List B	3	HHP 2230	First Aid and Terminology	3
USS 1000	Undergraduate Student Success	1	ELECTIVE	From List C	3
		17/18			17
Sophomore			Sophomore		
ELECTIVE	From List D	4	ELECTIVE	From List D	3
HHP 1132	Skills II (Volleyball & Soccer)	2	HHP 1110	Intermediate Swimming	1
ELECTIVE	From List C	3	HHP 3312	Sports Psychology	2
ELECTIVE	Elective	3	HHP 1133	Skills III (Tracks & Field)	3
HHP Activity		1	ART 2400	Beginning Ceramics	3
			HHP 3318	Principles of Coaching	2
		15			16
Junior			Junior		
HHP 2255	Clinical Teaching I	1	HHP 3320	PE for the Elementary School	3
HHP 3317	Sports Officiating	3	HHP 4471	Outdoor Education	3
PSC 1120	Intro to Public Administration	3	SOC 2230	Intro to Gerontology	3
BUS 2200	Legal Environment of Business	3	HHP 2243	Lifeguard Training	2
MUS 2215	Music Methods	2	HHP 4470	Organization/Administration	3
HHP 3361	Intro to Therapeutic Recreation	2	HHP 4455	Clinical Teaching III	1

HHP 3355	Clinical Teaching II	1	HHP 4472	Legal & Financial Aspects	2
		15			17
Senior			Senior		
ELECTIVE	Elective	3	ELECTIVE	HHP Elective	2
HHP 3322	Recreational Leadership	3	HHP 4490	Field Experience	10
HHP 4463	Management of Recreation & Intramural Sports	3			
HHP 4486	Senior Problems	3			
		12			12

BACHELOR OF ARTS IN POLITICAL SCIENCE - ENG 1100 or ENG 1101 and ENG 1102; USS 1000; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122 plus 3 Humanities credit hours from List B ; Social and Behavioral Sciences - 6 hours from two different disciplines from List C (ECO 2210 Principles of Microeconomics and ECO 2220 Principles of Macroeconomics fulfill this requirement); Natural and Physical Sciences (7 credit hours from two different disciplines from List D; one choice must include a lab.); Computer Skills (2-4 credit hours) from List A; 1 HHP Activity from List E as well as 8 hours in a foreign language.

A minimum of 33 credit hours in political science courses to include the following: PSC 1100, PSC 2223, PSC 3304, PSC 3381 and PSC 4895. Students are also required to take, and receive Political Science credit for, SOC 2206. A grade of "C" or better is required in all political science classes and in SOC 2206. Students are required to take ECO 2210 and ECO 2220 as **to fulfill** their social science component in the general education requirements. Each political science major is to have one area of concentration (9 credit hours), and two sub-areas of study, one with 6 credit hours and one with 3 credit hours. Required classes are not included as part of these hours.

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS MAJOR IN POLITICAL SCIENCE

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Arts in Political Science - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	PSC 2223	Introduction to Political Science	3
HIS XXXX	1110/1121/1122	3	ELECTIVE	University Electives	6
MTH 1550	Modern Applications of Math	3	ELECTIVE	From List A	2
PSC 1100	American National Government	3			
HHP 1XXX	HHP Activity	1			
Total		16			15
Sophomore			Sophomore		
SoC 2206	Social and Behavioral Statistics	4	ECO 2210	Principles of Microeconomics	3
ELECTIVE	From List B	3	PSC XXXX	Primary Area, Political Science	3

ELECTIVE	From List D (with Lab)	4	PSC XXXX	Secondary Area, Political Science	3
ELECTIVE	University Electives	4	ELECTIVE	From List D	3
ELECTIVE	University Electives	3	ELECTIVE	University Elective	3
Total		18			15
Junior			Junior		
ECO 2210	Principles of Macroeconomics	3	PSC XXXX	Secondary Area, Political Science	3
FLA 1XXX	Foreign Language I	4	FLA 1XXX	Foreign Language II	4
PSC XXXX	Primary Area, Political Science	3	ELECTIVE	From List A	6
ELECTIVE	University Elective	3	ELECTIVE	University Elective	3
PSC XXXX	Primary Area, Political Science	3			
Total		16			16
Senior			Senior		
PSC 3381	Constitutional Law	3	PSC 4895	Senior Capstone	3
PSC XXXX	Political Science Elective	3	PSC XXXX	Tertiary Area, Political Science	3
ELECTIVE	University Electives	9	ELECTIVE	University Electives	6
Total		15			12

BACHELOR OF ARTS IN POLITICAL SCIENCE - Public Administration - ENG 1100 or ENG 1101 and ENG 1102; USS 1000;
MTH 1550; HIS 1110 or HIS 1121 or HIS 1122 plus 3 Humanities credit hours from List A; Social and Behavioral Sciences - 6 hours from two different disciplines from List C; Natural and Physical Sciences (7 credit hours from two different disciplines from List D; one choice must include a lab.); Computer Skills (2-4 credit hours) from List A; 1 HHP Activity from List E as well as 8 hours in a foreign language.

A minimum of 30 credit hours in Political Science to include the following courses: PSC 1100, PSC 1120, PSC 2223, PSC 3304, PSC 3310, PSC 3381, PSC 3390, PSC 4403, PSC 4493, PSC4895. Other required courses are: ACC 2210 and ACC 2220;
BUS 1100 and BUS 2343; ECO 2210, ECO 2220, ECO 3350; ENG 3000; BUS 3381; MGT 3343 or SOC 2206. A grade of "C" or
better is required.

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS MAJOR IN POLITICAL SCIENCE
Public Administration

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Arts in Political Science - Public Administration - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Research the Essay	4

USS 1000	Undergraduate Success Seminar	2	PSC 2223	Introduction to Political Science	3
HIS XXXX	1110/1121/1122	3	ELECTIVE	From List D	3
MTH 1550	Modern Applications of Math	3	ELECTIVE	From List A	2
PSC 1100	American National Government	3	BUS 1100	Contemporary American Business	3
HHP 1XXX	HHP Activity	1			
Total		16			15
Sophomore			Sophomore		
SoC 2206	Social and Behavioral Statistics	4	BUS 2343	Principles of Management	3
PHI 2240	Critical Thinking	3	HIS 2202	History of U.S. Since 1877	3
ELECTIVE	From List D (with Lab)	4	PSC 3310	Public Policy Analysis	3
PSC 1120	Introduction to Public Administration	3	PSY 3420	Social Psychology	3
ELECTIVE	University Electives	3	ELECTIVE	From List B	3
Total		17			15
Junior			Junior		
ACC 2210	Principles of Accounting	3	ACC 2220	Principles of Accounting	3
ECO 2210	Principles of Microeconomics	3	BUS 2343	Principles of Management	3
ILC 1XXX	International Language I	4	ECO 2220	Principles of Macroeconomics	3
PSC 3304	American State & Local Government	3	ILC 1XXX	International Language II	4
PSC 3361	African American Politics	3	PSC 4503	Human Resource Management	3
Total		16			16
Senior			Senior		
ECO 3350	Public Finance	3	ELECTIVE	University Electives	3
ENG 2020	Vocabulary Development	2	MGT 3381	organizational Behavior	3
PSC 3381	Constitutional Law	3	PSC 4493	Legal & Public Admin Internship	5
PSC 3390	Public Budgeting	3	PSC 4895	Senior Capstone	3
ELECTIVE	From List B	3			
Total		14			14

BACHELOR OF ARTS IN PSYCHOLOGY - ENG 1100 or ENG 1101 and ENG 1102; USS 1000; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from two different disciplines from List C; Natural and Physical Sciences (7 credit hours from two different disciplines from List D; one choice must include a lab.); Computer Skills (2-4 credit hours) from List A; 1 HHP Activity from List E as well as 8 hours in a foreign language.

A minimum of 36 semester hours in psychology to include the following courses: PSY 1100, PSY 1200, PSY 2220, PSY 2320, PSY 3334, PSY 3450, PSY 4895 and SOC 2206. No psychology course may be counted for major credit unless the grade received is at least a "C".

SUGGESTED CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS MAJOR IN PSYCHOLOGY

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Arts in Psychology - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	PSY 2200	Human Growth & Development	3
HIS XXXX	1110/1121/1122	3	ELECTIVE	University Elective	3
MTH 1550	Modern Applications of Math	3	ELECTIVE	From List A	3
PSY 1100	Freshman Seminar	1	ELECTIVE	From List B	3
PSY 1200	Introduction to Psychology	3			
Total		16			16
Sophomore			Sophomore		
PSY 2320	Abnormal Psychology	3	HHP 1XXX	HHP Activity	1
SoC 2206	Social and Behavioral Statistics	4	PSY 3334	Psychological Measurement	3
ELECTIVE	From List B	3	PSY 3420	Social Psychology	3
ELECTIVE	From List C	3	ELECTIVE	From List B	3
ELECTIVE	From List D (with Lab)	4	ELECTIVE	From List C	3
			ELECTIVE	From List D	3
Total		17			16
Junior			Junior		
PSY 3450	Research Methods	4	ILC 1XXX	International Language II	4
PSY XXXX	Psychology Elective	3	PSY XXXX	Psychology Elective	2
ILC 1XXX	International Language I	4	PSY XXXX	Psychology Elective	3
ELECTIVE	University Elective	3	PSY XXXX	Psychology Elective	3
			ELECTIVE	University Elective	3
Total		14			15
Senior			Senior		

PSY XXXX	Psychology Electives	15	PSY 4895	Senior Capstone	3
			PSY XXXX	Psychology/University Electives	9
Total		15			12

BACHELOR OF SCIENCE IN PSYCHOLOGY - ENG 1100 or ENG 1101 and ENG 1102; USS 1000; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from two different disciplines from List C; Natural and Physical Sciences (7 credit hours from two different disciplines from List D, one choice must include a lab.), Computer Skills (2-4 credit hours) from List A; 1 HHP Activity from List E.

A minimum of 36 semester hours in psychology to include the following courses: PSY 1100, PSY 1200, PSY 2220, PSY 2320, PSY 3334, PSY 3450, PSY 4895 and SOC 2206. No psychology course may be counted for major credit unless the grade received is at least a "C".

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN PSYCHOLOGY

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Psychology - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	PSY 2200	Human Growth & Development	3
HIS XXXX	1110/1121/1122	3	SoC 2206	Social and Behavioral Statistics	4
MTH 1550	Modern Applications of Math	3	ELECTIVE	From List A	2
PSY 1100	Freshman Seminar	1	ELECTIVE	From List B	3
PSY 1200	Introduction to Psychology	3			
Total		16			16
Sophomore			Sophomore		
HHP 1XXX	HHP Activity	1	PSY 3334	Psychological Measurement	3
PSY 2320	Abnormal Psychology	3	PSY XXXX	Psychology Elective	3
ELECTIVE	From List C	3	ELECTIVE	University Elective	3
ELECTIVE	From List D (with Lab)	4	ELECTIVE	From List C	3
SBS ELECTIVE	ELECTIVE (other than Psychology)	3	ELECTIVE	From List D	3
Total		14			15
Junior			Junior		
PSY 3450	Research Methods	4	PSY XXXX	Psychology Elective	3
PSY XXXX	Psychology Elective	3	PSY XXXX	Psychology Elective	3
ILC 1XXX	International Language I	4	PSY XXXX	Psychology Elective	3
ELECTIVE	University Elective	3	ILC 1XXX	International Language II	4
ELECTIVE	University Elective	3	ELECTIVE	University Elective	3
Total		17			16

Senior			Senior		
PSY XXXX	Psychology Electives	14	PSY 4895	Senior Capstone	3
			PSY XXXX	Psychology/University Electives	9
Total		14			12

BACHELOR OF ARTS IN SOCIAL WORK - ENG 1100 or ENG 1101 and ENG 1102; USS 1000; MTH 1550; HIS 1110 or HIS
1121 or HIS 1122 plus 3 Humanities credit hours from List (PHI 2240 Critical Thinking is required); Social and Behavioral Sciences - 6 hours from two different disciplines from List C (PSY 1200 Intro. to Psychology and SOC 1105 Intro. To Sociology are required); Natural and Physical Sciences - 7 credit hours from two different disciplines from List D (NOTE: one choice must include a lab), social work majors must select BIO 1500 (Environmental Science with Lab) as one of their choices; Computer Skills (2-4 credit hours) from List A; 1 HHP Activity from List E as well as 8 hours (I and II of the same language) in a foreign language, and 6 additional hours of Humanities from List B.

A minimum of 49 credit hours in Social Work to include the following courses: SWK 1100, SWK 2200, SWK 3011, SWK 3012, SWK 3406, SWK 4201, SWK 4202, SWK 4203, SWK 4595, SWK 4596; SOC 2206 and 2800. Also, required is COM 2214.
Students must have a cumulative grade point average of 2.0 or better to graduate with a degree in social work.

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS MAJOR IN SOCIAL WORK

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree ***Minimum hours needed to obtain a Bachelor of Arts in Social Work - 127***

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
SWK 1100	Introduction to Social Work	3	SWK 2200	Introduction to Social Welfare	3
USS 1000	Undergraduate Success Seminar	2	CoM 2214	Public Speaking	3
HIS XXXX	1110/1121/1122	3	ENG 1102	Writing and Research the Essay	4
MTH 1550	Modern Applications of Math	3	HHP 1XXX	HHP Activity	1
ENG 1101	Intro to Writing for College	4	ELECTIVE	From List A	2
			ELECTIVE	University Elective	3
Total		15			16
Sophomore			Sophomore		
SWK 3011	Human Behavior I	3	SWK 3012	Human Behavior II	3
PHI 2240	Critical Thinking	3	SoC 1105	Introduction to Sociology	3
ELECTIVE	University Elective	3	SoC 2800	Methods of Research	4
SoC 2206	Social Statistics	4	BIO 1500	Environmental Science	4
ELECTIVE	From List D	3	HIST 1121 or 1122	Global Civilization I or II	3
Total		16			16
Junior			Junior		
SWK 4201	Generalist Practice I	3	SWK 4202	Generalist Practice II	3

ILC 1XXX	International Language I	4	ILC 1XXX	International Language II	4
PSY 1200	Introduction to Psychology	3	SWK 3406	Social Welfare Policy	3
SWK XXXX	SWK Elective	3	SWK XXXX	SWK Elective	3
ELECTIVE	From List B	3	ELECTIVE	From List B	3
Total		16			16
Senior			Senior		
SWK 4203	Generalist Practice III	3	SWK 4595	Field Seminar	2
SWK XXXX	SWK Elective	3	SWK 4596	Field Practicum	12
ELECTIVE	University Elective	6			
Total		12			14

BACHELOR OF SCIENCE IN SOCIAL WORK - ENG 1100 or ENG 1101 and ENG 1102; USS 1000; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122 plus 3 Humanities credit hours from List B (PHI 2240 Critical Thinking is required); Social and Behavioral Sciences - 6 hours from two different disciplines from List C (PSY 1200 Intro. to Psychology and SOC 1105 Intro. to Sociology are required); Natural and Physical Sciences - 7 credit hours from two different disciplines from List D (NOTE: one choice must include a lab), social work majors must select BIO 1500 (Environmental Science with Lab) as one of their choices.; Computer Skills (2-4 credit hours) from List D; 1 HHP Activity from List E and 3 hours of Humanities from List B.

A minimum of 49 credit hours in Social Work to include the following courses: SWK 1100, SWK 2200, SWK 3011, SWK 3012, SWK 3406, SWK 4201, SWK 4202, SWK 4203, SWK 4595, SWK 4596; SOC 2206 and SOC 2800. Also, required is COM 2214 Students must have a cumulative grade point average of 2.0 or better to graduate with a degree in social work.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN SOCIAL WORK

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Social Work - 127

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
SWK 1100	Introduction to Social Work	3	SWK 2200	Introduction to Social Welfare	3
USS 1000	Undergraduate Success Seminar	2	ELECTIVE	From List A	2
HIS XXXX	1110/1121/1122	3	ENG 1102	Writing and Research the Essay	4
MTH 1550	Modern Applications of Math	3	ELECTIVE	From List B	2
ENG 1101	Intro to Writing for College	4	ELECTIVE	University Elective	3
HHP 1XXX	HHP Activity	1			
Total		16			15
Sophomore			Sophomore		

SWK 3011	Human Behavior I	3	SWK 3012	Human Behavior II	3
PHI 2240	Critical Thinking	3	SWK XXXX	SWK Elective	3
SoC 1105	Introduction to Sociology	3	SoC 2800	Methods of Research	4
SoC 2206	Social Statistics	4	BIo 1500	Environmental Science	4
CoM 2214	Public Speaking	3	PSY 1200	Introduction to Psychology	3
Total		16			16
Junior			Junior		
SWK 4201	Generalist Practice I	3	SWK 4202	Generalist Practice II	3
ELECTIVE	University Elective	3	ELECTIVE	University Elective	3
ELECTIVE	University Elective	3	SWK 3406	Social Welfare Policy	3
SWK XXXX	SWK Elective	6	ELECTIVE	University Elective	6
Total		15			15
Senior			Senior		
SWK 4203	Generalist Practice III	3	SWK 4595	Field Seminar	2
SWK XXXX	SWK Elective	3	SWK 4596	Field Practicum	12
ELECTIVE	University Elective	6			
Total		12			14

BACHELOR OF ARTS IN SOCIOLOGY **-** ENG 1100 or ENG 1101 and ENG 1102; USS 1000; MTH 1550; HIS 1110 or HIS

-1121 or HIS 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from two different disciplines from List C; Natural and Physical Sciences - 7 credit hours from two different disciplines from List D (NOTE: one choice must include a lab); Computer Skills (2-4 credit hours) from List A; 1 HHP Activity from List E. and the special requirements for the Bachelor of Arts.
A minimum of 31 credit hours in Sociology to include the following courses: SOC 1105, SOC 1111 or SOC 1125, SOC 2206, SOC 2800, SOC 3800, SOC 4895, and additional courses selected in consultation with the academic advisor. Sociology majors must also complete PHI 2240 and 3300; these courses may also be counted toward the completion of any other University requirements. In addition, two semesters of foreign language is required for the B.A. degree in Sociology.

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS MAJOR IN SOCIOLOGY

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree

Minimum hours needed to obtain a Bachelor of Arts in Sociology - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	SoC 1111 or 1125	Anthropology or Social Problems	3
HIS XXXX	1110/1121/1122	3	ELECTIVE	From List B	3
HHP 1XXXX	HHP Activity	1	ELECTIVE	University Elective	3
MTH 1150	Modern Applications of Math	3	ELECTIVE	From List C	2
SoC 1105	Introduction to Sociology	3			

Total		16			15
Sophomore			Sophomore		
PHI 2240	Critical Thinking	3	SoC 2800	Methods of Research	4
SoC 2206	Social and Behavioral Statistics	4	SoC 3325	Race and Ethnic Relations	3
ELECTIVE	From List C	3	SoC 3345	Soc. of Marriage & Family	3
ELECTIVE	From List D	3	ELECTIVE	From List C	3
ELECTIVE	University Elective	4	ELECTIVE	From List D	3
Total		17			16
Junior			Junior		
SoC 3300	Criminology	3	FLA 1XXX	Foreign Language II	4
SoC 3800	Sociological Theory	3	PHI 3300	Logic and Scientific Method	3
FLA 1XXX	Foreign Language I	4	SoC 3370	The Family and Aging	3
ELECTIVE	University Elective	3	SoC XXXX	Sociology Elective	3
ELECTIVE	University Elective	3	ELECTIVE	University Elective	3
Total		16			16
Senior			Senior		
SoC 3343	Social Stratification	3	SoC 4895	Senior Capstone	3
SoC 3510	Sociology of Deviance	3	ELECTIVE	Sociology or University Electives	9
SoC XXXX	Sociology Elective	3			
ELECTIVE	University Elective	6			
Total		15			12

BACHELOR OF SCIENCE IN SOCIOLOGY - ENG 1100 or ENG 1101 and ENG 1102; USS 1000; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from two different disciplines from List C; Natural and Physical Sciences - 7 credit hours from two different disciplines from List D NOTE: one choice must include a lab); Computer Skills (2-4 credit hours) from List D; 1 HHP Activity from List E.

A minimum of 31 credit hours in Sociology to include the following courses: SOC 1105, SOC 1111 or SOC 1125, SOC 2206, SOC 2800, SOC 3800, SOC 4895, and additional courses selected in consultation with the academic advisor. Sociology majors must also complete PHI 2240 and 3300; these courses may also be counted toward the completion of any other University requirement. Sociology majors must repeat all Sociology courses in which a grade of "D" or "F" is received.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN SOCIOLOGY

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree ***Minimum hours needed to obtain a Bachelor of Science in Sociology - 120***

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Research the Essay	4

USS 1000	Undergraduate Success Seminar	2	SoC 1111 or 1125	Anthropology or Social Problems	3
HIS XXXX	1110/1121/1122	3	ELECTIVE	From List B	3
HHP 1XXXX	HHP Activity	1	ELECTIVE	University Elective	3
MTH 1150	Modern Applications of Math	3	ELECTIVE	From List C	2
SoC 1105	Introduction to Sociology	3			
Total		16			15
Sophomore			Sophomore		
PHI 2240	Critical Thinking	3	SoC 2800	Methods of Research	4
SoC 2206	Social and Behavioral Statistics	4	SoC 3325	Race and Ethnic Relations	3
ELECTIVE	From List C	3	SoC XXXX	Sociology Elective	3
ELECTIVE	From List D	3	ELECTIVE	From List C	3
ELECTIVE	University Elective	4	ELECTIVE	From List D	3
Total		17			16
Junior			Junior		
SoC 3300	Criminology	3	ELECTIVE	University Elective	6
SoC 3800	Sociological Theory	3	PHI 3300	Logic and Scientific Method	3
SoC 3343	Social Stratification	3	SoC 3370	The Family and Aging	3
ELECTIVE	University Elective	3	SoC XXXX	Sociology Elective	3
ELECTIVE	University Elective	3			
Total		15			15
Senior			Senior		
SoC 3343	Social Stratification	3	SoC 4895	Senior Capstone	3
SoC 3510	Sociology of Deviance	3	ELECTIVE	Sociology or University Electives	9
SoC XXXX	Sociology Elective	3			
ELECTIVE	University Elective	6			
Total		15			12

DEPARTMENT OF HUMANITIES

The Department offers the B.A. degree in English (Literature, and Pre-Law) and Humanities (History and Interdisciplinary Studies).

The Department also offers minors in Pre-Law, Philosophy & Religion, Africana Studies, Literature, Environmental Humanities, and Gender and Sexuality Studies.

All majors in the department must complete the university's general education curriculum, the specific requirements of the chosen major field, and the special requirements for the Bachelor of Arts degree. Students are responsible for knowing and adhering to required exam schedules and for following announced deadlines for applying for graduation.

The Department of Humanities supports the larger mission of Central State University; educates students in their B.A. and Minor fields and in General Education courses; stresses critical, independent thinking in its curricula; and supports the creative and professional growth of both students and faculty.

ENGLISH

The English program offers a curriculum of writing courses to support the university's general education curriculum as well as two degrees: the B.A. in English with a literature option and the B.A. in English with a pre-law option. Each degree requires that students earn at least a "C" in major courses being used to satisfy graduation requirements. MINORS: Creative Writing, Literature, Pre-Law.

Majoring in English literature develops strong abilities in critical thinking, research, analytical and persuasive writing, and critical reading. The program offers a wide variety of courses in creative writing, literature, rhetoric and composition, as well as cultural studies and criticism, world literature, and diverse special topics.

Students pursuing a legal career must be well prepared for the academic rigors of law school and the legal profession. Essential areas of development for the pre-law student are analytical thinking, critical reading, superior writing and research, and task management and organizational skills. To assist the pre-law student in the development of these areas, the Department of Humanities offers both an English Pre-Law major and minor in addition to the pre-law program and student group.

HUMANITIES

The B.A. in Humanities offers two degrees: a B.A. in Humanities-Interdisciplinary Studies and a B.A. in Humanities-History. The Humanities program prepares students for a wide range of careers by fostering the adaptability, critical thinking, creativity, and communication skills necessary for personal and professional success in the 21st century. The curriculum provides unique opportunities for students to explore more than one discipline and develop the abilities, skills, and interests that lead to fulfilling careers and that employers are consistently seeking in college graduates. This approach draws on the strengths of multiple fields, making students more well-rounded critical thinkers well suited to adapt to our rapidly changing world.

The B.A. in Humanities is a rigorous humanities-based degree program. The program's customizable liberal-arts style degree plan supports a variety of student goals, including incorporating differing fields of interest, continuing education from a 2-year degree program, transferring with diverse course credits, or changing majors. Because the program is designed to give students a competitive edge in the job market, this degree is especially beneficial for students interested in combining the humanities with training in medicine, business, physics, science, technology, or other fields.

Students in the Humanities program take courses across the disciplines housed in the Humanities Department; their curriculum includes a required introduction to interdisciplinary studies, three courses focused in one specific discipline, key required courses from each departmental discipline, and a concluding capstone course specific to Humanities. Students develop their focus with a portfolio that is built through their work throughout the program of study.

The Humanities program offers **Textbook Free** pathways aimed at making college more accessible and affordable. These textbook free pathways use open educational resources (OER) in place of printed textbooks. These courses are designed with the cutting-edge research accessible through scholarly articles, websites, videos, podcasts, and other media. These high-quality electronic course materials make education affordable, while sustaining exceptional course content. These courses include:

- The Major Core: IDS 2100, ENG 2200, PHI 2240, ENG 3100, HIS 2100, HIS 2202, PHI 3500, IDS 4500
- Electives: ENG 2100, ENG 2300, ENG 2320, ENG 3030, ENG 3031, ENG 3020, ENG 4080, IDS 1500, HIS 2201, HIS 3270, HIS 3330, HIS 4370, PHI 2210, PHI 2230, PHI 2250, PHI 3000, PHI 3200, PHI 3350.

Students interested in the textbook free degree should consult with their advisor to plan their course curriculum.

PHILOSOPHY AND RELIGION

The Philosophy & Religion program offers a minor in Philosophy & Religion and supports the university's general education curriculum with introductory courses in philosophy, religion, ethics, and critical thinking. The program also offers upper- level courses that support a range of major and minor degree programs across the university. The program has special strengths in social, political, and moral philosophy, and its pluralistic curriculum offers students the opportunity to study thinkers and texts from diverse historical and geographical intellectual traditions. Analytical thinking, analytical writing, and creativity are the core skills students develop when taking courses in the Philosophy & Religion program. Students learn practical ways of applying philosophy in their majors, their professions, and their everyday lives.

PRE-LAW

Students pursuing a legal career must be well prepared for the academic rigors of law school and the legal profession. Essential areas of development for the Pre-Law student are analytical thinking, critical reading, superior writing and research, and task management and organizational skills. To assist the Pre-Law students in the development of these areas, Central State University offers a Pre-Law Interdisciplinary Minor.

DEPARTMENT OF HUMANITIES INTERNSHIPS GUIDELINES

The following guidelines for departmental internships outline the responsibilities of the student, the supervisor, and the participating faculty members. Please consult the Director of the Journalism and Digital Media program for internship guidelines in that area.

1. You must achieve junior classification to be eligible for an internship.
2. You should have a minimum 3.0 average in the major, and the permission of an instructor in the major, to obtain an internship.
3. When preparing for an internship, you must write a proposal (three typewritten pages) which explains the specific internship desired your experience and course work in the field, and how you want your internship to contribute to your career goals. This proposal is due to the department chair no later than the first week of class during the semester in which you begin the internship.

4. Normally you will receive academic credit for your internship (3, 4 or 5 hours) rather than payment. An employer choosing to pay a student should do so at the prevailing minimum wage rate or higher.

5. You may do your internship during a regular academic semester, during summer school, or during winter break. It is your responsibility to make sure that you are properly registered to receive academic credit. Up to two internships may be completed for academic credit. Retroactive credit cannot be given.
6. Each week you must participate in three to four hours of internship experience for each hour of academic credit received (based on a 17-week semester).
7. When applicable, you should develop a portfolio during the internship to be used later in interviews and as a reference source of your abilities.
8. Your supervisor must complete the Internship Evaluation Form, evaluating your performance, and return it to the department chair by the last day of class during the internship semester.
9. At the end of the internship, you must write an exit essay (three typewritten pages), in which you evaluate the experience. The essay should cover such issues as what you learned, whether it matched your expectations, whether and how it has promoted your career goals, and whether your ideas about your profession have changed because of the internship. The exit essay is due to the department chair by the last day of class.
10. The internship grade will be based on the supervisor's evaluation, the proposal, and the exit essay. For cases in which either the proposal or the exit essay has not been submitted to the department chair, the final grade will be adjusted accordingly.
11. Off-campus internships are limited and will be offered on a competitive basis to students based on GPA, commitment to a strong professional work ethic, ability to get along with others, dependability, and ability to project a positive image of the University. On-campus internships also may be limited and will be offered on a first-come basis, with preference given to graduating seniors.

CAREER OPPORTUNITIES

People who have earned 4-year degrees in the humanities have developed the skills and abilities highly sought after by most employers as well as most graduate and professional programs. Indeed, there is a wide spectrum of career choices available to someone who has majored in a field within the humanities. Popular career pathways include management and marketing, healthcare fields, and careers involving the creation of cutting- edge technology.

Businesses need the skills that humanities courses excel at developing. Surveys consistently show that the top attribute employers look for in job candidates is written communication skills. 80% of employers want to see proof of these skills before they hire someone. The top ten attributes that come after that include problem solving, ability to work in a team, analytical skills, verbal communication skills, leadership, detail-oriented, and flexibility/adaptability, attributes that our curriculum is designed to foster.

Evidence shows that humanities majors do well in business: 15% of humanities graduates go on to management positions, 14% go into office and administrative positions, 13% are in sales, and another 10% are in business and finance. Among managers in the marketing, advertising, and PR industries, those who studied the liberal arts earn an average of $20,000 a year more than those who majored in advertising and PR.

Tech giants such as Apple, Microsoft, Facebook, and Google consistently express a need for college graduates to have a well-rounded education that includes a strong background in the humanities. A 2015 *Forbes* article offers an example: a marketing manager at Facebook, Bess Yount earned a Stanford bachelor's degree in communication and a master's in sociology. "'I've always had a greater love for words than numbers,' Yount says. That hasn't been a problem. When she joined Facebook in 2010, the social media company was evolving rapidly beyond its engineer-centric beginnings. Instead of envisioning a day when ads could be booked online without ever talking to a human being, Facebook's leaders began tapping into the benefits of a personal touch" (from "That "Useless' Liberal Arts Degree has Become Tech's Hottest Ticket").

Data from places such as Google show how critical an education based in the humanities is for anyone who wants to go into the tech industry. In 2013, Google analyzed its own hiring, firing, and promotions data going back to 1998. Of the eight most important qualities of Google's top employees, STEM expertise comes last. The seven traits above it are what are often referred to as soft skills: being a good coach, communicating and listening well, possessing insights into others (including others different values and points of view), having empathy toward and being supportive of one's colleagues, being a good critical thinker and problem solver, and being able to make connections across complex ideas. These results led Google to change its hiring practices to include humanities majors and artists.

Medical school administrators have been saying for decades that they want applicants with liberal arts and humanities backgrounds, that they greatly value what such applicants bring to the study of medicine, and that the medical doctors they graduate need experience with the humanities. Information on the application requirements for medical schools is available in this course catalog in the College of Engineering, Science, Technology, and Agriculture's section: "Preparation for Healthcare Professions." The high value that medical schools place on applicants with a broad undergraduate education based in the humanities shows strongly in whom those schools accept into their programs. A recent report by the American Association of Medical Colleges identifies humanities majors as having the highest acceptance rate into medical schools. Looking at these acceptance rates, more humanities majors are accepted than majors in biological sciences, math and statistics, physical sciences, and specialized health sciences. The data show that humanities majors have been the most likely to make it into medical school.

Additionally, a 2017 survey of more than 700 medical students found that the higher the students' exposure to the humanities, the higher the students scored on measures of empathy, wisdom, tolerance of ambiguity, resourcefulness, and emotional intelligence, and the lower they scored in signs of burnout. Majors in the humanities help students gain the necessary experience that can make them stronger applicants for medical school and better medical doctors.

STUDENT RESPONSIBILITY

Students in the program are required to meet regularly with their advisor. Though expected to seek academic advisement and guidance, students are ultimately responsible for complying with all university, college, and department regulations, and for satisfying all degree requirements.

BACHELOR OF ARTS IN ENGLISH - Literature - ENG 1100 or ENG 1101, ENG 1102; MTH 1550: HIS 1110 or HIS 1121 or HIS 1122; USS 1000; 1 semester credit from HHP 1101-1121; 3 Humanities semester hours from List B; Social and Behavioral Sciences - 6 hours from two different disciplines from List C; Natural and Physical Sciences 6 credit hours from two different disciplines from List D.

All students must take the following major requirements (See ACADEMIC PROGRAM) including special requirements for the B.A. (six additional semester hours in humanities and eight credits of international language), and the following major requirements: ENG 2200, ENG 3040, ENG 3100, ENG 4895; ENG 2300 or ENG 2400; ENG 3020 or ENG 3021; ENG 3010, ENG 3050, or ENG 3051; ENG 4080, ENG 4090, or ENG 4092. Students must also take 4 courses with an ENG prefix, 3000-level or above.

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS MAJOR IN ENGLISH (Literature)

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Arts in English - Literature - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1100 OR 1101	Intro to Writing and Reading or Intro to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	ENG 2300 OR 2400	Intro to Creative Writing or Intro to Rhetoric	4
ENG 2200	Introduction to Literary Studies	3	ELECTIVE	From List B	3
MTH 1550	Modern Applications of Math	3	ELECTIVE	From List C	3
HIS XXXX	1110/1121/1122	3	HHP 1XXX	HHP Activity	1
Total		16			15
Sophomore			Sophomore		
ENG 3040	British Literature I	3	ENG 3020/3021	African American Literature I or II	3
ILC 1XXX	International Language I	4	ILC 1XXX	International Language II	4
ELECTIVE	From List B	3	ELECTIVE	From List B	3
ELECTIVE	From List C	3	ELECTIVE	From List D	3
ELECTIVE	From List D	3	ELECTIVE	Electives/Minor	3
Total		16			16
Junior			Junior		
ENG 3100	Literary Criticism	3	ENG 3051 or 3052 or 3010	World Literature I or World Literature II or African Literature	3
ELECTIVE	With ENG prefix 3000 and above	3	ELECTIVE	With ENG prefix 3000 and above	3
ELECTIVE	Electives/Minor	9	ELECTIVE	Elective/Minor	9
Total		15			15
Senior			Senior		
ENG 4895	Senior Seminar	4	ENG 4080 or 4090 or 4092	Shakespeare & His Influence or American Literary History or British Literary History	3

ELECTIVE	With ENG prefix 3000 and above	3	ELECTIVE	With ENG prefix 3000 and above	3
ELECTIVE	Electives/Minor	9	ELECTIVE	Electives/Minor	9
Total		16			15

BACHELOR OF ARTS IN ENGLISH - Pre-Law ENG 1100 or ENG 1101, ENG 1102; MTH 1550: HIS 1110 or HIS 1121 or HIS 1122; USS 1000; 1 semester credit from HHP 1101-1121; 3 Humanities semester hours from List B; Social and Behavioral Sciences - 6 hours from two different disciplines from List C; Natural and Physical Sciences 6 credit hours from two different disciplines from List D.

All students must take the following major requirements (See ACADEMIC PROGRAM) including special requirements for the B.A. (six additional semester hours in humanities and eight credits of international language), and the following major requirements to include 12 hours from the following: BUS 2200; COM 4447; ECO 2200; HIS 2202; LAW 1100; PHI 2240; PSC 3381; SOC 3333 (See ACADEMIC PROGRAM) including special requirements for the B.A. (six additional semester hours in humanities and eight credits of international language), and the following major requirements: ENG 2200, ENG 3040, ENG 3100, ENG 4895; ENG 2300 or ENG 2400; ENG 3020 or ENG 3021; ENG 3010, ENG 3050, or ENG 3051; ENG 4080, ENG 4090, or ENG 4092. Students must also take 4 courses with an ENG prefix, 3000-level or above.

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS MAJOR IN ENGLISH (Pre-Law)

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Arts in English - Pre-Law - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1100 OR 1101	Intro to Writing and Reading or Intro to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	ENG 2400	Intro to Rhetoric	4
ENG 2200	Introduction to Literary Studies	3	ECO 2200	Introduction to Economics	3
MTH 1550	Modern Applications of Math	3	ELECTIVE	From List B	3
HIS XXXX	1110/1121/1122	3	HHP 1XXX	HHP Activity	1
Total		16			15
Sophomore			Sophomore		
ENG 3040	British Literature I	3	ENG 3020/3021	African American Literature I or II	3
ILC 1XXX	International Language I	4	ILC 1XXX	International Language II	4
HIS 2202	History of the U.S. Since 1877	3	PHI 2240	Critical Thinking	3
ELECTIVE	From List C	3	ELECTIVE	From List D	3
ELECTIVE	From List D	3	ELECTIVE	Electives/Minor	3
Total		16			16
Junior			Junior		
ENG 3100	Literary Criticism	3	ENG 3051 or 3052 or 3010	World Literature I or World Literature II or African Literature	3
ELECTIVE	With ENG prefix 3000 and above	3	ELECTIVE	With ENG prefix 3000 and above	3
ELECTIVE	Electives/Minor	9	ELECTIVE	Elective/Minor	9

Total		15			15
Senior			Senior		
ENG 4895	Senior Seminar	4	ENG 4080 or 4090 or 4092	Shakespeare & His Influence or American Literary History or British Literary History	3
ELECTIVE	With ENG prefix 3000 and above	3	ELECTIVE	With ENG prefix 3000 and above	3
ELECTIVE	Electives/Minor	9	ELECTIVE	Electives/Minor	9
Total		16			15

BACHELOR OF ARTS IN HUMANITIES (HISTORY)- ENG 1100 or ENG 1101, ENG 1102; MTH 1550 or MTH1750; HIS 1110, HIS 1121 or HIS 1122; USS 1000; 1 semester credit from HHP 1101-1121; 3 Humanities semester hours from List B; Social and Behavioral Sciences – 6 hours from two different disciplines from List C; Natural and Physical Sciences 6 credit hours from two different disciplines from List D.

All students must take the following major requirements, including special requirements for the B.A. (six additional semester hours in humanities), and the following major requirements: IDS 2100, ENG 2200, PHI 2240, HIS 2202, BUS 1500, IDS 4500. Each Humanities-History major must complete 3 courses at the 3000 level or above for a total of at least 9 hours in one concentration from HIS, and HIS 2100. Students must complete a sub-category of 3 courses at the 2000 level or above in HIS for a total of at least 9 hours in HIS. In addition, two semesters of an international language is required for the B.A. in Humanities – History. Students must meet minimum required hours for graduation.

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS IN HUMANITIES - HISTORY

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Arts in Humanities - History—120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1100 OR 1101	Intro to Writing and Reading or Intro to Writing for College	4-5	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	IDS 2100	Intro to Studies in the Humanities	3
ENG 2200	Introduction to Literary Studies	3	BUS 1500	Computer Applications for Business	3
MTH 1150 or 1750	Modern Applications of Math or College Algebra	3	ELECTIVE	From List B	3
HIS XXXX	1110/1121/1122	3	ELECTIVE	From List C	3
Total		15-16			16
Sophomore			Sophomore		
PHI 2240	Critical Thinking	3	HIS 2202	History of U.S. Since 1877	3
ILC 1XXX	International Language I	4	ILC 1XXX	International Language II	4

ELECTIVE	Humanities Electives From List B	3	ELECTIVE	History Elective for IDS Concentration	3
ELECTIVE	General Education From List C	3	ELECTIVE	General Education From List D	3
ELECTIVE	General Education From List A	1	ELECTIVE	Electives or Minor	3
Total		14			16
Junior			Junior		
ELECTIVE	Theoretical Elective (HIS 2100)	3	ELECTIVE	Humanities Electives From List B	3
ELECTIVE	General Education From List D	3	ELECTIVE	Humanities Elective for IDS Concentration	6
ELECTIVE	Humanities Elective for IDS Concentration	6	ELECTIVE	Electives/Minor	9
ELECTIVE	Electives/Minor	3			
Total		15			15
Senior			Senior		
ELECTIVE	Humanities Elective for IDS Concentration	6	IDS 4500	Senior Capstone in Humanities	3
ELECTIVE	Electives/Minor	9	ELECTIVE	Minor	10
Total		15			13

CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS MAJOR IN HUMANITIES -INTERDISCIPLINARY STUDIES

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Arts in Humanities - Interdisciplinary Studies – 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1100 OR 1101	Intro to Writing and Reading or Intro to Writing for College	4-5	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	IDS 2100	Intro to Studies in the Humanities	3
ENG 2200	Introduction to Literary Studies	3	BUS 1500	Computer Applications for Business	3
MTH 1150 or 1750	Modern Applications of Math or College Algebra	3	ELECTIVE	From List B	3
HIS XXXX	1110/1121/1122	3	ELECTIVE	From List C	3
Total		15-16			16
Sophomore			Sophomore		
PHI 2240	Critical Thinking	3	HIS 2202	History of U.S. Since 1877	3
ILC 1XXX	International Language I	4	ILC 1XXX	International Language II	4
ELECTIVE	Humanities Elective From List B	3	ELECTIVE	Humanities Elective for IDS Concentration	3
ELECTIVE	General Education From List C	3	ELECTIVE	General Education From List D	3

ELECTIVE	From List A	1	ELECTIVE	Electives Minor	3
Total		14			16
Junior			Junior		
ELECTIVE	Theoretical Elective (COM 3306 or ENG 3100 OR HIS 2100 or PHI 3500)	3	ELECTIVE	Humanities Electives From List B	3
ELECTIVE	General Education From List D	3	ELECTIVE	Humanities Elective for HIS Concentration	6
ELECTIVE	Humanities Elective for HIS Concentration	6	ELECTIVE	Electives/Minor	9
ELECTIVE	Electives/Minor	3			
Total		15			15
Senior			Senior		
ELECTIVE	Humanities Elective for HIS Concentration	6	IDS 4500	Senior Capstone in Humanities	3
ELECTIVE	Electives/Minor	9	ELECTIVE	Minor	10
Total		15			13

Department of Professional Education and Music

The Department of Professional Education and Music is comprised of a number of programs and units to support student learning within these specific disciplines. You'll find the information organized by program area.

- The Professional Education Program also includes the School of Agricultural Education and Food Science and The Teacher Education Advisement Partnership Center. This section also includes the information for each specific teacher licensure degree program.
- The Music Program includes four distinct degree programs: Bachelor of Music in Jazz Studies, Bachelor of Music in Music Education, Bachelor of Music in Performance, and Bachelor of Arts in Music Technology.

Professional Education Program

ACCREDITATION

The Educator Preparation Program (EPP) is accredited by the Council for Accreditation of Educator Preparation (CAEP) and the educator preparation programs are approved by the Ohio Department of Higher Education.

EPP MISSION

The Mission of the Department of Professional Education is to prepare educators who continuously reflect on their effectiveness in serving as facilitators of learning for the diverse student populations. The EPP is actively committed to the preparation of educators who observe students in various learning situations and, as a result, apply appropriate professional strategies to enhance the teaching-learning environment.

ADMISSION TO EPP REQUIREMENTS

Admission to the Educator Preparation Program is required before candidates can enter a major in the Educator Preparation Program and enroll in upper-level education courses. To be eligible to submit an admission application, candidates must satisfy the following requirements:

1. Submit acceptable Admissions Application
2. Earn a minimum GPA of 2.75 (Transfer Students after 12 semester credit hours.)
3. Earn a minimum of 32 hours in general education courses (20 hours for Music)
4. **Out-of-state** students are required to have a clear BCII/FBI Check Results or school district verification form and Meet Basic Academic Skills;
5. **In-State (Ohio)** students are required to have a 3-Year Pre-Service Teacher Permit. The permit is required for **Ohio** candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Competency on one of the following below:

- **High School/CCP GPA of 2.75 or higher**, grades C or higher in MTH 1550/1750 and ENG 1100/1101 and ENG 1102 *(if ACT or SAT scores are not met)*
  -OR-
- **Community College GPA of 2.75 or higher.** Must have completed 60 or more credit hours, grades C or higher, in MTH 1550/1750 and ENG 1100/1101 and ENG 1102
  -OR-
- **College/University GPA of 2.75 or higher.** Must have completed 60 or more credit hours, grades C or higher, in MTH 1550/1750 and ENG 1100/1101 and ENG 1102
  -OR-
  ACT
  - ACT Reading $\geq$ 21.25
  - ACT Writing $\geq$ 6.60

- ACT Math ≥ 21.25

-OR-

SAT, Combined Reading, Writing, and Math Score ≥ 860

PROGRAMS

The Department of Professional Education consists of three programs: Professional Education, Music, and The School of Agricultural Education and Food Science. The EPP offers baccalaureate degree programs that prepare candidates for teacher licensure in the areas listed below.

Licensure Programs:

- Agricultural Education 4-12
- Integrated Language Arts Education, 7-12
- Integrated Mathematics Education, 7-12
- Integrated Social Studies, 7-12
- Intervention Specialist, K-12 (mild to moderate)
- Life Science Education, 7-12
- Physical Science Education, 7-12
- Middle Childhood Education, 4-9
  - Teaching Areas: Language Arts Education; Mathematics Education; Science Education; Social Studies Education
    - Music Education, K-12
    - Primary, PK-5

The following non-licensure programs prepare students for opportunities in nonformal Education and community outreach that do not require a professional teaching license.

Non-licensure Programs:

- Educational Studies
- Agricultural Education Extension

CONCEPTUAL FRAMEWORK

The Educator Preparation Program is undergirded by the Conceptual Framework. The theme of the Conceptual Framework is: *Preparing Reflective Educators Who Practice Evidence-based Instruction by Advocating and Demonstrating Appropriate Learning Strategies for Diverse Student Populations*. The Conceptual Framework has three elements that define the content and clinical experiences that comprise the design of educator preparation at Central State University. The three Elements are: Knowledge, Practice and Professionalism. Teacher candidates are prepared to engage in reflective practice that incorporates the psychological, cultural, social, and economic factors that impact students' learning.

Post Baccalaureate Route

The EPP offers a post-baccalaureate route to teacher licensure. The post-baccalaureate route is designed for individuals who have completed the baccalaureate degree from an accredited institution with a minimum cumulative grade point average of 2.75, and who wish to obtain an initial teaching license. Individuals interested in seeking admission to Post Baccalaureate status should consult the University Office of Admissions or the appropriate EPP program. Candidates must meet all core content requirements for the licensure program. They must also complete all foundations and core requirements. The program is available to traditional and online students. Post-baccalaureate candidates are not required to be admitted to EPP.

Transfer Students

Students transferring from another institution must complete an admission application to Central State University.

Integrated Language Arts Education Program
The Integrated Language Arts Education Program leads to the Bachelor of Science in Education Degree and prepares candidates to qualify for the Ohio license to teach Integrated English and Language Arts in grades 7 - 12. In addition to general education and professional pedagogy, candidates are required to complete content courses in Communication; Drama; Literature courses in African, African American, American, World, and British. Twelve to fifteen weeks of clinical experience through Student Teaching are required.

Program Requirements
To pursue a major in the Integrated Language Arts Education Program, candidates are admitted to The Educator Preparation Program (EPP) (see admission to the Educator Preparation Program section of this catalog), complete content and pedagogy courses and all clinical experiences (see suggested program of study). A cumulative grade point average of 2.75 is required for admission. Candidates must maintain a cumulative grade point average of at least a cumulative 2.75 for graduation. Candidates must satisfactorily complete the Ohio Assessments for Educators (OAE) before admission to Student Teaching is approved. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted. In addition, candidates who reside outside Ohio, must submit to TEAP-C the results of a current BCII/FBI background check or current employee verification form that clears the candidate for Program participation. Each background check is valid for one calendar year. The 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Field and Clinical Experiences
The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection; Level 2 - application of methods strategies practicum; and Level 3 - Student Teaching Clinical. Successful completion of all Field and Clinical experiences is required for graduation. Candidates should consult the appropriate Suggested Program of Study to identify those courses that require fieldwork. The EPP has collaborative partnerships and Memorandums of Understanding with local school districts and more than 100 school districts across the continental United States. Candidates should contact the director of Field and Clinical experiences. As of July 1, 2024, the 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit.

Candidate Monitoring
The Unit Assessment System collects data that is analyzed to monitor candidates' academic progression from admission through successful completion of the Program. Data on candidates' progression are collected at various points of Program delivery, including different Program courses, Field Experiences and Student Teaching.

BACHELOR OF SCIENCE IN Education - Integrated Language Arts Education- ENG 1101 and ENG 1102; MTH 1750; HIS 1110 or HIS 1121 or 1122 plus 3 humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from 2 different disciplines from List C; Natural and Physical Sciences- 6 credit hours from 2 different disciplines from List D, USS 2000, 5-6 hours electives and 1 credit hour of Physical Activity from List A.

The following Language Arts Education requirements: COM 2200, DRM 2201 or DRM 2202, EDU 2200, EDU 2300, EDU 2500, EDU 2600 or EDU 3262, EDU 3263, EDU 3264, EDU 3265, EDU 3266, EDU 3325, EDU 3310, EDU 3325, EDU 3330, EDU 3361, EDU 4491, and EDU 4895. Also, the following English requirements: ENG elective, ENG 2020, ENG 2200, ENG 2020 or ENG3021, ENG 3030, ENG 3040, ENG 3100, ENG 4015, ENG 4050 or ENG 4060, ENG 4080, and ENG 4895. Students must earn all C's or better in their major and education courses and maintain at least a GPA of 2.75 in their degree program.

CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE IN EDUCATION DEGREE - Integrated Language Arts Education Program

Integrated Language Arts Education Program

* FBI = Federal Bureau of Investigation; BCII = Ohio Bureau of Criminal Identification and Investigation

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Intro to Writing Reading for College or	4	ENG 1102	Writing/Researching the Essay	4
MTH 1750	College Algebra	3	ELECTIVE	From List B * ENG 2200 – Introduction to Literary Studies	3
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List D *From two or more disciplines	3
USS 1000	Undergraduate Student Success	2	HHP 1XXX	From List A	1
EDU 2600	Intro to Teacher Education	3	ELECTIVE	From List C * EDU 2300 Educational Psychology	3
		15			14
Sophomore			Sophomore		
ELECTIVE	From List D *From two or more disciplines	3	ELECTIVE	Elective List B, C, D	3
ELECTIVE	From List B	3	ENG 2020	Vocabulary Development and Applications	3
ENG 3040	British Literature I	3	ENG 3020 or ENG 3021	African American Literature I or African American Literature II	3
DRM 2201 Or DRM 2202	Dev of Drama Tragedy or Development of Drama Comedy	3	ENG 4015	Advanced Research Writing	3
EDU 2500	Professional Education Seminar	2	ELECTIVE	From List C	3
ELECTIVE	Elective List B, C, D	3	MTH 3000	Geometry for Teacher	3
		17			18
Junior			Junior		
COM 2200	Intro to Mass Communication	3	ENG 4080	Shakespeare & His Influence	3
EDU 3263	Classroom Management/Field	3	EDU 3264	Multicultural Education	3

ENG 3030	American Literature I	3	EDU 3266	Individuals w/Special Needs/Field	3
ENG 3100	Literary Criticism Theory/Practice	3	EDU 3265	Educational Technology	3
EDU 2200	Intro to Teaching Reading	3	EDU 3310	Language and Literacy/Microteaching	3
		15			15
Senior			Senior		
EDU 3361	MCE & AYA Language Arts Methods/Field	3	EDU 4491	Student Teaching	9
EDU 4050 or ENG 4060	Forms/Genres: Novel or Forms/Genres: Poetry	3	EDU 4895	Capstone Seminar	3
ENG 4895	Capstone Seminar	3			
EDU 3330	Reading in the Content Area/Microteaching	3			
EDU 3325	Measurement & Assessment	3			

Ohio Assessments for Educators (OAE) Assessment of Professional Knowledge Assessment of Content Knowledge

The OAE assesses candidates' mastery of professional knowledge and content knowledge. Passing scores are required before placement in Student Teaching and Program completion. Detailed information about the OAE is available at http://www.oh.nesinc.com. Additional information and supplemental instruction sessions are provided by TEAP-C. Candidates are encouraged to consult with TEAP-C to prepare for successful completion of the OAE requirement.

Student Responsibility

Candidates in the Program are required to meet regularly with their advisor. Candidates are required to comply with all regulations stipulated by the University, the EPP and the Professional Education Program. Though expected to seek academic advisement and guidance, candidates are ultimately responsible for satisfying all degree and licensure requirements.

Candidates, in consultation with their advisor, must submit an application for graduation at a time stipulated by the Department and the University.

Integrated Mathematics Education Program

The Integrated Mathematics Education Program leads to the Bachelor of Science in Education Degree and prepares candidates to qualify for the Ohio license to teach Integrated Mathematics, grades 7 - 12.

In addition to general education and professional pedagogy, candidates are required to complete content courses in Computer Science, Probability & Statistics, Trigonometry, Calculus, Linear Algebra, Multivariate Calculus, Differential Equations, Algebraic Structures, Discrete Structures and the History of Mathematics, Mathematics Methods Practicum. Twelve to fifteen weeks of clinical experience through Student Teaching are required.

Program Requirements:

To pursue a major in the Integrated Language Arts Education Program, candidates are admitted to Educator Preparation Program (EPP) complete content and pedagogy courses and all clinical experiences (see suggested program of study). A cumulative grade point average of 2.75 is required for admission. Candidates must maintain at least a cumulative grade point average of 2.75 for graduation. Candidates must satisfactorily complete the Ohio Assessments for Educators (OAE) before admission to Student Teaching is approved. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted. In addition, candidates who reside outside Ohio, must submit to TEAP-C the results of a current BCII/FBI background check or current employee verification form that clears the candidate for Program participation. Each background check is valid for one calendar year. The 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled

in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Field and Clinical Experiences

The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection; Level 2 - application of methods strategies practicum; and Level 3 - Student Teaching Clinical. Successful completion of all Field and Clinical experiences is required for graduation. Candidates should consult the appropriate Suggested Program of Study to identify those courses that require fieldwork. The EPP has collaborative partnerships and Memorandums of Understanding with local school districts and more than 100 school districts across the continental United States. Candidates should contact the director of Field and Clinical experiences. As of July 1, 2024, the 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit.

Candidate Monitoring

The Unit Assessment System collects data that are analyzed to monitor candidates' academic progression from admission through successful completion of the Program. Data on candidates' progression are collected at various points of Program delivery, including different Program courses, Field Experiences, and Student Teaching.

BACHELOR OF SCIENCE IN Education - Integrated Mathematics - ENG 1101 and ENG 1102; MTH 1750; HIS 1110 or HIS 1121 or 1122 plus 3-6 Humanities credit hours from List B; Social and Behavioral Sciences 3- 6 hours from 2 different disciplines from List C; Natural and Physical Sciences 3- 6 credit hours from 2 different disciplines from List D, USS 2000, 5-6 hours electives and 1 credit hour of Physical Activity from List A and 3 credit hour of CPS 1191 Computer Science I.

The following Mathematics Education requirements: EDU 2300, EDU 2500, EDU 2600, EDU 3263, EDU 3264, EDU 3265, EDU 3266, EDU 3325, EDU 3330, EDU 3362, EDU 4491, and EDU 4895, HHP 1000. Also, the following Mathematics requirements: MTH 2001, MTH 2002, MTH 2501, MTH 2502, MTH 2503, MTH 2520, MTH 2530, MTH 2540, MTH 3000, MTH 3001, MTH 3002, MTH 3110, MTH 3520, and MTH 3610.

Students are required to earn all C's or better in their major and education courses and also maintain at least a GPA of 2.75 in their degree program.

CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE IN EDUCATION DEGREE

Integrated Mathematics Education Program

* FBI = Federal Bureau of Investigation; BCII = Ohio Bureau of Criminal Identification and Investigation

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Intro to Writing Reading for College	4	ENG 1102	Writing/Researching the Essay	4
MTH 1750	College Algebra	3	MTH 2501	Trigonometry	3
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B	3
USS 1000	Undergraduate Student Success	2	ELECTIVE	From List D	3
EDU 2600	Intro to Teacher Education	3	ELECTIVE	List C	3
HHP 1000	Health & Wellness	1			
		16			16
Sophomore			Sophomore		
MTH 2001	Probability & Statistics I	3	MTH 2002	Probability & Statistics II	3
MTH 2502	Calculus I	4	MTH 2503	Calculus II	5
MTH 2540	Foundations in Mathematics	3	ELECTIVE	From List D	3
EDU 2500	Professional Education Seminar	2	EDU 3265	Educational Technology	3
ELECTIVE	List C *EDU 2300 Educational Psychology	3	Elective	List B, C, D	3
Elective	List B, C, D	3			
		18			17
Junior			Junior		
MTH 3001	Linear Algebra	3	ELECTIVE	From List B	3
MTH 3110	Differential Equations	4	MTH 3002	Calculus III	3
EDU 3263	Classroom Management/Field	3	MTH 3610	Intro to Discrete Structures	3
EDU 3264	Multicultural Education	3	EDU 3330	Reading in the Content Area	3
			EDU 3266	Individuals w/Special Needs/Field	3
		13			15
Senior			Senior		
EDU 3362	MCE/AYA Mathematics Methods/Field	3	EDU 4491	Student Teaching	9

MTH 3520	Abstract Algebra I	3	EDU 4895	Capstone Seminar	3
MTH 3000	Geometry for Teachers	3			
EDU 3325	Measurement & Assessment	3			
MTH 3530	Mathematical Writing/ Research	2			
		14			12

Ohio Assessments for Educators (OAE) Assessment of Professional Knowledge Assessment of Content Knowledge

The OAE assesses candidates' mastery of content knowledge and professional knowledge. Passing scores are required before placement in Student Teaching and Program completion. Detailed information about the OAE is available at http://www.oh.nesinc.com. Additional information and supplemental instruction sessions are provided by TEAP-C. Candidates are encouraged to consult with TEAP-C to prepare for successful completion of the OAE requirement.

Student Responsibility

Candidates in the Program are required to meet regularly with their advisor. Candidates are required to comply with all regulations stipulated by the University, the EPP and the Professional Education program. Though expected to seek academic advising and guidance, candidates are ultimately responsible for satisfying all degrees and licensure requirements. Candidates, in consultation with their advisor, must submit an application for graduation at a time stipulated by the department and the university.

Social Studies Education Program

The Integrated Social Studies Education Program leads to the Bachelor of Science in Education Degree and prepares candidates to qualify for Ohio license to teach Integrated Social Studies, grades 7 - 12. Social studies program prepares the nation's young people for college, careers, and civic life, which is referred to as the C3 Framework. Social studies program prepares the nation's young people for college, careers, and civic life, which is referred to as the C3 Framework. The C3 Framework is centered on an inquiry arc that emphasizes the disciplinary concepts and practices that support students as they develop the capacity to know, analyze, explain, and argue about interdisciplinary challenges in our social world.

In addition to general education and professional pedagogy, candidates are required to complete content courses in Economics, History, Political Science, Sociology and Geography, and Social Studies Practicum. Twelve to fifteen weeks of clinical experience through Student Teaching are required.

Program Requirements

To pursue a major in the Integrated Language Arts Education Program, candidates are admitted to Educator Preparation Program (EPP) complete content and pedagogy courses and all clinical experiences (see suggested program of study). A cumulative grade point average of 2.75 is required for admission. Candidates must at least maintain a cumulative grade point average of 2.75 for graduation. Candidates must satisfactorily complete the Ohio Assessments for Educators (OAE) before admission to Student Teaching is approved. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted. In addition, candidates who reside outside Ohio, must submit to TEAP-C the results of a current BCII/FBI background check or current employee verification form that clears the candidate for Program participation. Each background check is valid for one calendar year. The 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Field and Clinical Experience

The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection; Level 2 - application of methods strategies practicum; and Level 3 - Student Teaching Clinical. Successful completion of all Field and Clinical experiences is required for graduation. Candidates should consult the appropriate Suggested Program of Study to identify those courses that require fieldwork. The EPP has collaborative partnerships and Memorandums of Understanding with local school districts and more than 100 school districts across the continental United States. Candidates should contact the director of Field and Clinical experiences. As of July 1, 2024, the 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit.

Candidate Monitoring

The Unit Assessment System collects data that is analyzed to monitor candidates' academic progression from admission through successful completion of the Program. Data on candidates' progression are collected at various points of Program delivery, including different Program courses, Field Experiences, and Student Teaching.

BACHELOR OF SCIENCE IN Education - Integrated Social Studies - ENG 1101 and ENG 1102; MTH 1750; HIS 1110 or HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from 2 different disciplines from List C; Natural and Physical Sciences- 6 credit hours from 2 different disciplines from List D, USS 1000, 5-6 hours electives and 1 credit hour of Physical Activity from List A.
The following Social Studies Education requirements: ECO 2210, ECO 2220, EDU 2300, EDU 2500, EDU 2600 or EDU 3262, EDU 3263, EDU 3264, EDU 3265, EDU 3266, EDU 3325, EDU 3330, EDU 3371, EDU 4491, EDU 4895, HHP 1010, PSC 2202, PSC 2205, PSC 3304, SOC 1125, and SOC 3343. Also, the following.
History requirements: HIS 2201, HIS 1121, HIS 1122, HIS 4370, HIS 4371, MTH 300, PSC 2202, PSC 2205, PSC 3304, PSC 3310, SOC 3343,
Students are required to earn all C's or better in their major and education courses and also maintain at least a GPA of 2.75 in their degree program.

CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE IN EDUCATION DEGREE

Integrated Social Studies Education Program

* FBI = Federal Bureau of Investigation; BCII = Ohio Bureau of Criminal Identification and Investigation

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Intro to Writing Reading for College	4	ENG 1102	Writing/Researching the Essay	4
MTH 1750	College Algebra	3	PCS 2205	Introduction to Africa	3
HIS 1110	Intro to History of Africans in the US	3	ELECTIVE	From List D	3
USS 1000	Undergraduate Student Success	2	HHP 1XXX	From List A	1
EDU 2600	Intro to Teacher Education	3	ELECTIVE	From List B	3
			HIS 1121	Global History to 1500	3
		15			17
Sophomore			Sophomore		
HIS 1122	Global History Since 1500	3	ECO 2220	Principles of Macroeconomics	3
HIS 2201	History of U.S. to 1877	3	ELECTIVE	From List D	3
ELECTIVE	From List B	3	PSC 2202	International Politics	3
EDU 2500	Professional Education Seminar	2	PSC 3310	Public Policy Analysis	3
ECO 2210	Principles of Microeconomics	3	ELECTIVE	From List C	3
ELECTIVE	ELECTIVE List B, C, D	3			
		17			15
Junior			Junior		
ELECTIVE	From List C Educational Psychology	3	HIS 4371	Recent America 1941-Present	3
EDU 3263	Classroom Management/Field	3	EDU 3330	Reading in the Content Area	3
EDU 3264	Multicultural Education	3	EDU 3266	Inclusion/Individual w/Special	3
PSC 3304	American/State/Local Government	3	EDU 3265	Educational Technology	3
SOC 3343	Social Stratification	3	EDU 3325	Measurement & Assessment	3
MTH 3000	Geometry for Teachers	3			

		18			15
Senior			Senior		
EDU 3371	MCE/AYA Social Studies Methods	3	EDU 4491	Student Teaching	9
HIS 4370	Recent America 1900-1941	3	EDU 4895	Capstone Seminar	3
ELECTIVE	ELECTIVE List B, C, D	3			
HIS 4995	Global History Capstone Seminar	3			
		12			12

Ohio Assessments for Educators (OAE) Assessment of Professional Knowledge Assessment of Content Knowledge

The OAE assesses candidates' mastery of professional knowledge and content knowledge. Passing scores are required before placement in Student Teaching and Program completion. Detailed information about the OAE is available at http://www.oh.nesinc.com. Additional information and supplemental instruction sessions are provided by TEAP-C. Candidates are encouraged to consult with TEAP-C to prepare for successful completion of the OAE requirement.

Student Responsibility

Candidates in the Program are required to meet regularly with their advisor. Candidates are required to comply with all regulations stipulated by the University, the EPP and the Professional Education program. Though expected to seek academic advisement and guidance, candidates are ultimately responsible for satisfying all degree and licensure requirements. Candidates, in consultation with their advisor, must submit an application for graduation at a time stipulated by the Department and the University.

Life Science Education Program

The Life Science Education Programs leads to the Bachelor of Science in Education Degree and prepares candidates to qualify for Ohio license to teach Life Science subjects' grades, 7 - 12.

In addition to general education and professional pedagogy, Life Science candidates are required to complete content courses in Biology, Evolution, Human Anatomy, Microbiology, Zoology, Plant Biology, Molecular Genetics, Ecology, Chemistry, Earth Science, Probability & Statistics, Calculus, and Basic Physics. Twelve to fifteen weeks of clinical experience through Student Teaching are required.

Program Requirements

To pursue a major in the Life Science Education Program, candidates are admitted to Educator Preparation Program (EPP), complete content and pedagogy courses and all clinical experiences (see suggested program of study). A cumulative grade point average of 2.75 is required for admission. Candidates must maintain at least a cumulative grade point average of 2.75 for graduation. Candidates must satisfactorily complete the Ohio Assessments for Educators (OAE) before admission to Student Teaching is approved. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted. In addition, candidates who reside outside Ohio, must submit to TEAP-C the results of a current BCII/FBI background check or current employee verification form that clears the candidate for Program participation. Each background check is valid for one calendar year. The 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Field and Clinical Experiences

The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection; Level 2 - application of methods strategies practicum; and Level 3 - Student Teaching Clinical. Successful completion of all Field and Clinical experiences is required for graduation. Candidates should consult the appropriate Suggested Program of Study to identify those courses that require fieldwork. The EPP has collaborative partnerships and Memorandums of Understanding with local school districts and more than 100 school districts across the continental United States. Candidates should contact the director of Field and Clinical experiences. As of July 1, 2024, the 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit.

ACCREDITATION

The Educator Preparation Program (EPP) accredited by the Council for Accreditation of Educator Preparation (CAEP) and the educator preparation programs are approved by the Ohio Department of Higher Education.

EPP MISSION

The Mission of the Department of Professional Education is to prepare educators who continuously reflect on their effectiveness in serving as facilitators of learning for the diverse student populations. The EPP is actively committed to the preparation of educators who observe students in various learning situations and, as a result, apply appropriate professional strategies to enhance the teaching-learning environment.

BACHELOR OF SCIENCE IN Education - Life Science - ENG 1101 and ENG 1102; MTH 1750; HIS 1110 or HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from 2 different disciplines from List C; BIO 1500, and PH, 1100 from List D, USS 1000, 5-6 hours electives and 1 credit hour of Physical Activity from List A.The following Life Science Education requirements: CHM 1201, EDU 2300, EDU 2500, EDU 2600, EDU 3263, EDU 3264, EDU 3265, EDU 3266, EDU 3325, EDU 3330, EDU 3372, EDU, EDU 4491, EDU 4895. Also, the following Biology requirements: BIO 1750, BIO 1801, BIO 1802, BIO 2000, BIO 2400, BIO 2650, BIO 2750, BIO 2850, BIO 3500, and BIO 4500, and EXS 2301 and EXS 2302, MTH 3000. Students are required to earn all C's or better in their major and education courses and also maintain at least a GPA of 2.75 in their degree program.

CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE IN EDUCATION DEGREE

Life Science Education Program

* FBI = Federal Bureau of Investigation; BCII = Ohio Bureau of Criminal Identification and Investigation

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Intro to Writing Reading for College	4	ENG 1102	Writing/Researching the Essay	4
MTH 1750	College Algebra	3	BIO 1750	Biological Concepts	4
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B	3
USS 1000	Undergraduate Student Success	2	ELECTIVE	From List D *PHY 1120 Physical Science	3
EDU 2600	Intro to Teacher Education	3	HHP 1XXX	From List A	1
		15			15
Sophomore			Sophomore		
ELECTIVE	From List D *BIO 1500 Environmental Science	3	ELECTIVE	From List C *EDU 2300 Educational Psychology	3
ELECTIVE	From List C	3	BIO 1802	Fundamental of Biology II w/Lab	4
BIO 1801	Fundamentals of Biology I w/Lab	4	BIO 2000	Evolution	2
CHM 1201	General Chemistry I	4	BIO 2650	Microbiology	4
EDU 2500	Professional Education Seminar	2	SOC 1105	Introductory Sociology	3
		16			16
Junior			Junior		
EDU 3263	Classroom Management/Field	3	EDU 3266	Individual w Special Needs/Field	3
EXS 2301	Anatomy & Physiology I	4	EXS 2302	Anatomy & Physiology II	4
BIO 2400	Molecular Genetics	4	EDU 3265	Intro to Educational Technology	3
BIO 2750	Zoology	2	EDU 3264	Multicultural Education	3
EDU 3330	Reading in the Content Area	3	EDU 3325	Measurement & Assessment	3

		16			16
Senior			Senior		
BIO 2850	Plant Biology	2	EDU 4491	Student Teaching	9
MTH 3000	Geometry for Teachers	3	EDU 4895	Capstone Seminar	3
EDU 3372	MCE/AYA Science Methods/Field	3			
BIO 3500	Ecology	4			
BIO 4500	Undergraduate Research in Biology	2			
		14			12

Ohio Assessments for Educators (OAE) Assessment of Professional Knowledge Assessment of Content Knowledge

The OAE assesses candidates' mastery of content knowledge and professional knowledge. Passing scores achieved by all candidates are required before placement in Student Teaching and Program completion. Detailed information about the OAE is available at http://www.oh.nesinc.com. Additional information and supplemental instruction sessions are provided by TEAP-C. Candidates are encouraged to consult TEAP-C to prepare for successful completion of the OAE requirements.

Student Responsibility

Candidates in the Program are required to meet regularly with their advisor. Candidates are required to comply with all regulations stipulated by the University, the EPP and the Professional Education program. Though expected to seek academic advisement and guidance, candidates are ultimately responsible for satisfying all degree and licensure requirements.

Physical Science Education Program

The Physical Science Education Programs leads to the Bachelor of Science in Education Degree and prepares candidates to qualify for Ohio license to teach Physical Science subjects' grades, 7 - 12.
In addition to general education and professional pedagogy, Physical Science candidates are required to complete courses in Chemistry, Earth Science Mathematics, and Physics. Twelve to fifteen weeks of clinical experience through Student Teaching are required.

Program Requirements

To pursue a major in the Physical Science Education Program, candidates are admitted to Educator Preparation Program (EPP), complete content and pedagogy courses and all clinical experiences (see suggested program of study). A cumulative grade point average of 2.75 is required for admission. Candidates must maintain at least a cumulative grade point average of 2.75 for graduation. Candidates must satisfactorily complete the Ohio Assessments for Educators (OAE) before admission to Student Teaching is approved. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted. In addition, candidates who reside outside Ohio, must submit to TEAP-C the results of a current BCII/FBI background check or current employee verification form that clears the candidate for Program participation. Each background check is valid for one calendar year. The 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Field and Clinical Experiences

The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection; Level 2 - application of methods strategies practicum; and Level 3 - Student Teaching Clinical. Successful completion of all Field and Clinical experiences is required for graduation. Candidates should consult the appropriate Suggested Program of Study to identify those courses that require fieldwork. The EPP has collaborative partnerships and Memorandums of Understanding with local school districts and more than 100 school districts across the continental United States. Candidates should contact the director of Field and Clinical experiences. As of July 1, 2024, the 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit.

ACCREDITATION

The Educator Preparation Program (EPP) accredited by the Council for Accreditation of Educator Preparation (CAEP) and the educator preparation programs are approved by the Ohio Department of Higher Education.

EPP MISSION

The Mission of the Department of Professional Education is to prepare educators who continuously reflect on their effectiveness in serving as facilitators of learning for the diverse student populations. The EPP is actively committed to the preparation of educators who observe students in various learning situations and, as a result, apply appropriate professional strategies to enhance the teaching-learning environment.

BACHELOR OF SCIENCE IN Education – Physical Science - ENG 1101 and ENG 1102; MTH 1750; HIS 1110 or HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from 2 different disciplines from List C; BIO 1500, GEO 1110 from List D, USS 1000, 5-6 hours electives and 1 credit hour of Physical Activity from List A.

The following Physical Science Education requirements: CHM 1201, CHM 1202, CHM 1610, CHM 2200, CHEM 2401, CHM 4791, and CHM elective 4 hours, EDU 2300, EDU 2500, EDU 2600 , EDU 3263, EDU 3264, EDU 3265, EDU 3266, EDU 3325, EDU 3330, EDU 3372, EDU 4491, and EDU 4895, HHP 1000, MTH 2001. Also, the following Physics requirements: PH, 1183, PH, 2611, PH, 2612, PH, 4431 and PHY, elective 3 hours. Students are required to earn all C's or better in their major and education courses and also maintain at least a GPA of 2.75 in their degree program.

CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE IN EDUCATION DEGREE
Physical Science Education Program

* FBI = Federal Bureau of Investigation; BCII = Ohio Bureau of Criminal Identification and Investigation

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1100	Intro to Writing Reading for College	5	ENG 1102	Writing/Researching the Essay	4
MTH 1750	College Algebra	3	MTH 2001	Probability & Statistics	3
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B	3
USS 1000	Undergraduate Student Success	2	ELECTIVE	From List D *PHY	3
EDU 2600	Intro to Teacher Education	3	ELECTIVE	From List C EDU 2300 Educational Psychology	3
		16			16
Sophomore			Sophomore		
CHM 1201	General Chemistry I	4	ELECTIVE	From List C	3
EDU 2500	Professional Education Seminar	2	CHM 1202	General Chemistry II	4
PHY 1183	Intro to Astronomy	2	EDU 3265	Educational Technology	3
PHY 2611	College Physics I	4	PHY 2612	College Physics II	4
ELECTIVE	From List D *BIO 1500 Environmental Science	4	ELECTIVE	List B, C, D	3
HHP 1XXX	From List A	1			
		17			17
Junior			Junior		
EDU 3263	Classroom Management/Field	3	EDU 3266	Individual w/Special Needs	3
CHM 2401	Organic Chemistry	4	EDU 3264	Multicultural Education	3
GEO 3313	Weather and Climate	3	BIO 2000	Evolution	2
CHM 1610	Intro to Forensic Science	4	CHM 2200	Quantitative Analysis	4
			ELECTIVE	From List B	3
		14			15
Senior			Senior		

EDU 3330	Reading in the Content Area	3	EDU 4491	Student Teaching	9
EDU 3372	MCE/AYA Science Methods/Field	3	EDU 4895	Capstone Seminar	3
CHM 4791	Undergraduate Research I	2			
EDU 3325	Measurement & Assessment	3			
PHY 4431	Modern Physics	3			
		14			12

Ohio Assessments for Educators (OAE) Assessment of Professional Knowledge Assessment of Content Knowledge

The OAE assesses candidates' mastery of content knowledge and professional knowledge. Passing scores achieved by all candidates are required before placement in Student Teaching and Program completion. Detailed information about the OAE is available at http://www.oh.nesinc.com. Additional information and supplemental instruction sessions are provided by TEAP-C. Candidates are encouraged to consult TEAP-C to prepare for successful completion of the OAE requirements.

Student Responsibility

Candidates in the Program are required to meet regularly with their advisor. Candidates are required to comply with all regulations stipulated by the University, the EPP and the Professional Education program. Though expected to seek academic advisement and guidance, candidates are ultimately responsible for satisfying all degree and licensure requirements.

Intervention Specialist Education Program

The Intervention Specialist Education Program leads to the Bachelor of Science in Education Degree and qualifies the candidate to obtain an Ohio license as an Intervention Specialist for the Kindergarten level through grade 12.

In addition to general education and professional pedagogy, candidates are required to complete content courses in Special Education Law, Introduction to Mild-Moderate, Instructional Strategies/Mild-Moderate, Collaboration with Parents/Professional Ethics and Responsibilities, Intervention Specialist Curriculum and Assessment, Behavior Management, Careers and Transitions. Twelve to fifteen weeks of clinical experience through Student Teaching are required.

Program Requirements

To pursue a major in the Intervention Specialist Education Program, candidates are admitted to Educator Preparation Program (EPP) (see admission to Teacher Education Advisement Partnership Center, complete content and pedagogy courses and all clinical experiences (see suggested program of study). A cumulative grade point average of 2.75 is required for admission. Candidates must at least maintain a cumulative grade point average of 2.75 for graduation. Candidates must satisfactorily complete the Ohio Assessments for Educators (OAE) before admission to Student Teaching is approved. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted. In addition, candidates who reside outside Ohio, must submit to TEAP-C the results of a current BCII/FBI background check or current employee verification form that clears the candidate for Program participation. Each background check is valid for one calendar year. The 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Field and Clinical Experience

The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection; Level 2 - application of methods strategies practicum; and Level 3 - Student Teaching Clinical. Successful completion of all Field and Clinical experiences is required for graduation. Candidates should consult the appropriate Suggested Program of Study to identify those courses that require fieldwork. The EPP has collaborative partnerships and Memorandums of Understanding with local school districts and more than 100 school districts across the continental United States. Candidates should contact the director of Field and Clinical experiences. As of July 1, 2024, the 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit.

Candidate Monitoring

The Unit Assessment System collects data that is analyzed to monitor candidates' academic progression from admission through successful completion of the Program. Data on candidates' progression are collected at various points of Program delivery, including different Program courses, Field Experiences, and Student Teaching.

BACHELOR OF SCIENCE IN Education - Intervention Specialist **-**ENG 1101 and ENG 1102; MTH 1750; HIS 1110 or HIS 1121 or 1122 plus 3-6 Humanities credit hours from List B; 3-6 Social and Behavioral Sciences hours from List C; 6 Natural and Physical Sciences credit hours from List D, USS 1000, 5-6 hours electives and 1 credit hour of Physical Activity from List A

The following Intervention Specialist Education requirements: EDU 2200, EDU 2300, EDU 2500, EDU 2600, EDU 3263 or INS 4010, EDU 3264, EDU 3265, EDU 3266, EDU 3310, EDU 3315, EDU 3320, EDU 3325 or INS 3009, EDU 3330, EDU 3340, EDU 3341, EDU 4491, EDU 4895, EDU 3300, EDU 3335, EDU 3336, EDU 3337, and MTH 3000. Also, the following Intervention Specialist requirements: INS 4020, INS 3007, INS 4010 or EDU 3263, INS 4040, INS 4030, SOC 1125
Students are required to earn all C's or better in their major and education courses and also maintain at least a GPA of 2.75 in their degree program.

CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE IN EDUCATION DEGREE
Intervention Specialist Education Program
* FBI = Federal Bureau of Investigation; BCII = Ohio Bureau of Criminal Identification and Investigation

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Intro to Writing Reading for College	4	ENG 1102	Writing/Researching the Essay	4
MTH 1750	College Algebra	3	ELECTIVE	From List C	3
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	List B, C, D	3
USS 1000	Undergraduate Student Success	2	ELECTIVE	From List D *From two different areas	3
EDU 2600	Intro to Teacher Education	3	HHP 1000	Health and Wellness	1
			ELECTIVE	From List B	3
		15			17
Sophomore			Sophomore		
EDU 2500	Professional Education Seminar	2	ELECTIVE	From List D *From two different areas	3
SOC 1125	Social Problems	3	EDU 2200	Intro to Teaching Reading	3
EDU 2300	Educational Psychology	3	EDU 3341	Intro to Mild/Moderate	3
EDU 3340	Special Education Law	3	EDU 3265	Educational Technology	3
MTH 3000	Geometry for Teachers	3	EDU 3310	Language & Literacy	3
ELECTIVE	From List B	3			
		17			15
Junior			Junior		
EDU 3315 or EDU 3330	Teaching Reading Child Lit or Teaching Reading in Content Area/ Microteaching	3	EDU 3336	Science Methods	3
EDU 3264	Multicultural Education	3	EDU 3335	Math Methods	3
INS 4020	Communication Disorders for the Intervention Specialist	3	EDU 3320	Phonics & Reading	3

INS 4030	IEP Writing Mild/Moderate	3	INS 4040	Careers and Transitions	3
EDU 3266	Individuals w/Special Needs	3	INS 3007	Collaborating w/ Parents / Professionals Ethics/ Responsibilities	3
		15			15
Senior			Senior		
EDU 3337	Social Studies Methods	3	EDU 4491	Student Teaching	9
EDU 3300	Language Arts Methods	3	EDU 4895	Capstone Seminar	3
ELECTIVE	List B, C, D	3			
EDU 3325 or INS 3009	Measurement & Assessment or Curriculum and Assessment	3			
EDU 3263 or INS 4010	Classroom Management/Field or Behavior Management/Field	3			
		15			12

Ohio Assessments for Educators (OAE) Assessment of Professional Knowledge Assessment of Content Knowledge

The OAE assesses candidates' mastery of content knowledge and professional knowledge. Passing scores achieved by all candidates are required before placement in Student Teaching and Program completion. Detailed information about the OAE is available at http://www.oh.nesinc.com. Additional information and supplemental instruction sessions are provided by TEAP-C. Candidates are encouraged to consult TEAP-C to prepare for successful completion of the OAE requirement.

Student Responsibility

Candidates in the Program are required to meet regularly with their advisor. Candidates are required to comply with all regulations stipulated by the University, the EPP and the Professional Education program. Though expected to seek academic advisement and guidance, candidates are ultimately responsible for satisfying all degree and licensure requirements.

Primary Education PK-5

Primary Education PK-5 Program leads to a Bachelor of Science Education Degree and prepares candidates to qualify for the Ohio license to teach levels Pre-Kindergarten to grade 5.

In addition to general education and professional pedagogy, candidates are required to complete the content courses: Introduction to Early Childhood Education; Child Growth and Development; Curriculum and Instruction in Mathematics, Curriculum and Instruction in Science; Learning Environments and Creative Play; Observe/Document/Assess in Primary Education; Professional Ethics and Responsibilities in Education; Family and Community Relationships; Art for Early Childhood; Physical Education for Early Childhood; Music for Early Childhood; and Geometry for Teachers. Twelve to fifteen of 12 weeks of clinical experience through Student Teaching are required.

Program Requirements

To pursue a major in the Primary Education PK-5 Program, candidates are admitted to Educator Preparation Program (EPP), complete content and pedagogy courses and all clinical experiences (see suggested program of study). A cumulative grade point average of 2.75 is required for admission. Candidates must maintain at least a cumulative grade point average of 2.75 for graduation. Candidates must satisfactorily complete the Ohio Assessments for Educators (OAE) before admission to Student Teaching is approved. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted. In addition, candidates who reside outside Ohio, must submit to TEAP-C the results of a current BCII/FBI background check or current employee verification form that clears the candidate for Program participation. Each background check is valid for one calendar year. The 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Field and Clinical Experiences

The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection; Level 2 - application of methods strategies practicum; and Level 3 - Student Teaching Clinical. Successful completion of all Field and Clinical experiences is required for graduation. Candidates should consult the appropriate Suggested Program of Study to identify those courses that require fieldwork. The EPP has collaborative partnerships and Memorandums of Understanding with local school districts and more than 100 school districts across the continental United States. Candidates should contact the director of Field and Clinical experiences. As of July 1, 2024, the 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit.

Candidate Monitoring

The Unit Assessment System collects data that is analyzed to monitor candidates' academic progression from admission through successful completion of the Program. Data on candidates' progression are collected at various points of Program delivery, including different Program courses, Field Experiences, and Student Teaching.

BACHELOR OF SCIENCE IN Primary Education PK-5 ENG 1101 and ENG 1102; MTH 1750; HIS 1110 or HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences EDU 2300 from List C; Natural and Physical Sciences- 6 credit hours from 2 different disciplines from List D, USS 1000, 5-6 hours electives and 1 credit hour of Physical Activity from List A.

The following Primary Education PK-5 requirements: EDU 2200, EDU 2300, EDU 2500, EDU 2600, EDU 2700, EDU 3263, EDU 3264, EDU 3265, EDU 3266, EDU 3100, EDU, 3103, EDU 3104, EDU 3310, EDU 3315, EDU 3320, EDU 3325, EDU 4491, EDU 4895, HHP 1000, and MTH 3000. Also, the following Primary requirements: EDP 3210, EDU 3300, EDU 3335, EDU 3336, EDU 3337, EDU 4420, EDU 4435, EDU 4410. Students are required to earn all C's or better in their major and education courses and also maintain at least a GPA of 2.75 in their degree program.

Central State University, Department of Professional Education and Music
Students are responsible for knowing all requirements associated with this degree.

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Intro to Writing Reading for College	4	ENG 1102	Writing/Researching the Essay	4
MTH 1750	College Algebra	3	ELECTIVE	From List D *PHY 1183 Intro to Astronomy	2
HIS 1XXX	1121 or 1122	3	ELECTIVE	From List B HIS 1100 Ohio History	3
USS 1000	Undergraduate Student Success	2	ELECTIVE	From List C	3
ELECTIVE	From List D *PHY 1120 Physical Science	3	HHP 1000	Health and Wellness	1
		15			13
Sophomore			Sophomore		
ELECTIVE	Elective List B, C, D	3	EDU 2600	Intro to Teacher Education	3
ELECTIVE	Elective List B, C, D	3	ELECTIVE	From List C- EDU 2300 Educational Psychology	3
ELECTIVE	From List B	3	EDU 2700	Planning for Instruction	3
MTH 3000	Geometry for Teachers	3	EDU 2200	Intro to Teaching Reading	3
EDU 2500	Professional Education Seminar	2	EDU 3210	Child Growth & Dev	3
		14			15
Junior			Junior		
EDP 3100	Curriculum and Instruction	3	EDU 4420	Professional Ethics & Responsibilities	3
EDU 3263	Classroom Management	3	EDU 3315	Teaching Reading	3
EDU 3266	Individuals w Special Needs	3	EDU 3300	Language Arts Methods	3
EDU 3320	Phonics & Reading	3	EDP 3103	Curriculum & Instruction in Math	3
EDU 3310	Language & Literacy	3	EDP 3104	Curriculum & Instruction in Science	3
EDU 3264	Multicultural Education	3	EDU 3337	Social Studies Methods	3

		18			18
Senior			Senior		
EDU 3265	Educational Technology	3	EDU 4491	Student Teaching	9
EDU 3335	Mathematics Methods	3	EDU 4895	Capstone Seminar	3
EDU 3336	Science Methods	3			
EDU 4410	Family & Community Relationships	3			
EDU 4435	Observe/Document/ Assess	3			
		15			12

Ohio Assessments for Educators (OAE) Assessment of Professional Knowledge Assessment of Content Knowledge

The OAE assesses candidates' mastery of content knowledge and professional knowledge. Passing scores are required before placement in Student Teaching and Program completion. Detailed information about the OAE is available at http://www.oh.nesinc.com. Additional information and supplemental instruction sessions are provided by TEAP-C. Candidates are encouraged to consult with TEAP-C to prepare for successful completion of the OAE requirement.

Student Responsibility

Candidates in the Program are required to meet regularly with their advisor. Candidates are required to comply with all regulations stipulated by the University, the EPP and the Professional Education program. Though expected to seek academic advising and guidance, candidates are ultimately responsible for satisfying all degrees and licensure requirements. Candidates, in consultation with their advisor, must submit an application for graduation at a time stipulated by the department and the university.

(OAE) before admission to Student Teaching is approved. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted. In addition, candidates must submit to TEAP-C the results of a current BCII/FBI Background Check or current employee verification form that clears the candidate for Program participation. Each Background Check is valid for one calendar year. Therefore, a candidate may need a minimum of two BCII/FBI Background Checks before completing the Program. For more information about BCII/FBI Background Checks, candidates should contact their advisors and/or TEAP-C.

Program Requirements

To pursue a major in Middle Childhood Education, candidates are admitted to Educator Preparation Program (EPP), complete content and pedagogy courses and all clinical experiences (see suggested program of study). A cumulative grade point average of 2.75 is required for admission. Candidates must maintain at least a cumulative grade point average of 2.75 for graduation. Candidates must satisfactorily complete the Ohio Assessments for Educators (OAE) before admission to Student Teaching is approved. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted. In addition, candidates who reside outside Ohio, must submit to TEAP-C the results of a current BCII/FBI background check or current employee verification form that clears the candidate for Program participation. Each background check is valid for one calendar year. The 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Field and Clinical Experiences

The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection; Level 2 - application of methods strategies practicum; and Level 3 - Student Teaching Clinical. Successful completion of all Field and Clinical experiences is required for graduation. Candidates should consult the appropriate Suggested Program of Study to identify those courses that require fieldwork. The EPP has collaborative partnerships and Memorandums of Understanding with local school districts and more than 100 school districts across the continental United States. Candidates should contact the director of Field and Clinical experiences. As of July 1, 2024, the 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit.

Candidate Monitoring

The Unit Assessment System collects data that is analyzed to monitor candidates' academic progression from admission through successful completion of the Program. Data on candidates' progression are collected at various points of Program delivery, including different Program courses, Field Experiences, and Student Teaching.

***BACHELOR OF SCIENCE IN Education* - Middle Childhood (Language Arts/Social Studies) -** ENG 1100 and ENG 1102; MTH 1750; HIS 1110 or HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from 2 different disciplines from List C; Natural and Physical Sciences- 6 credit hours from 2 different disciplines from List D, USS 2000, 5-6 hours electives and 1 credit hour of Physical Activity from List A.

The following Middle Childhood Education requirements: COM 2200, EDU 2200, EDU 2300, EDU 2500, EU 2600 , EDU 3263, EDU 3264, EDU 3265, EDU 3266, EDU 3310, EDU 3320, EDU 3325, EDU 3330, EDU 3300, EDU 3335, EDU 3336, EDU 3337, EDU 4491, and EDU 4895. Also, the following Integrated Language Arts requirements: ENG 3021, ENG 3030, ENG 3051, ENG 3200, and ENG 4200 The following Social Studies requirements: ECO 2210 or ECO 2220, GEO 1110, HIS 2201, HIS 2202, PSC 1100, PSC 2202, PSC 3304 and SOC 1125. Students are required to earn all C's or better in their major and education courses and also maintain at least a GPA of 2.75 in their degree program.

CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE IN EDUCATION DEGREE

Middle Childhood Education Program (Language Arts/Social Studies)

* FBI = Federal Bureau of Investigation; BCII = Ohio Bureau of Criminal Identification and Investigation

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1100	Intro to Writing/Reading or Intro to Writing for College	5	ENG 1102	Writing/Researching the Essay	4
HIS 1XXX	1100, 1121 or 1122	3	SOC 1125	Social Problems	3
MTH 1750	College Algebra	3	ELECTIVE	From List D	3
USS 1000	Undergraduate Student Success	2	ELECTIVE	From List C	3
EDU 2600	Intro to Teacher Education	3	GEO 1110	Fundamentals of Geography	3
		16			16
Sophomore			Sophomore		
ELECTIVE	From List B	3	ECO 2210 or ECO 2220	Principles of Microeconomics or Principles of Macroeconomics	3
HIS 2201	History of the U.S. to 1877	3	ELECTIVE	From List D	3
HIS 1100	Ohio History	3	HIS 3321	History of Europe Since 1500	3
EDU 2500	Professional Education Seminar	2	HIS 2202	History of the US Since 1877	3
ELECTIVE	From List B	3	ELECTIVE	From List C EDU 2300 Educational Psychology	3
PSC 1100	American National Government	3	HHP 1XXX	From List A	1
		17			16
Junior			Junior		
EDU 3263	Classroom Management/Field	3	EDU 3266	Individual w/Special Needs	3
COM 2200	Intro to Mass Communication	3	EDU 3264	Multicultural Education	3
EDU 2200	Introduction to the Teaching of Reading	3	EDU 3265	Educational Technology	3
EDU 3310	Language & Literacy	3	ENG 3021	African American Lit II	3
ENG 3030	American Literature I	3	EDU 3320	Phonics & Reading	3
		15			15
Senior			Senior		

EDU 3325	Measurement & Assessment	3	ENG 4200	General Linguistics/Am. Grammar	3
PSC 2202	International Politics	3	HIS 4371	Recent America 1941-Present	3
PSC 3304	American State/Local Government	3	EDU 3361	MCE/ AYA Language Arts Methods	3
EDU 3330	Reading in the Content	3	EDU 3371	MCE/ AYA Social Studies Methods	3
ENG 3200	History of English Language	3	ENG 3051	World Literature	3
		15			15
5th Year					
EDU 4491	Student Teaching	9			
EDU 4895	Capstone Seminar	3			
		12			

BA***CHELOR OF SCIENCE IN Education*** **- Middle Childhood (Science/Mathematics)** ENG 1100 and ENG 1102; MTH 1750; HIS 1110 or HIS 1121 or 1122 plus 3 Humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from 2 different disciplines from List C; Natural and Physical Sciences- 6 credit hours from 2 different disciplines from List D, USS 2000, 5-6 hours electives and 1 credit hour of Physical Activity from List A. The following Middle Childhood Education requirements: EDU 2200, EDU 2300, EDU 2500, EDU 2600, EDU 3263, EDU 3264, EDU 3265, EDU 3266, EDU 3310, EDU 3320, EDU 3325, EDU 3330, EDU 3362, EDU 3372, EDU 4491, and EDU 4895. Also, the following Science requirements: BIO 1801, CHM 1050, GEL 1101, GEO 3313, PHY 1183, and PHY 2611. The following Mathematics requirements: MTH 2001, MTH 2502, MTH 2503, and MTH 3000. Students are required to earn all C's or better in their major and education courses and also maintain at least a GPA of 2.75 in their degree program.

CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE IN EDUCATION DEGREE

Middle Childhood Education Program (Science/Mathematics)

* FBI = Federal Bureau of Investigation; BCII = Ohio Bureau of Criminal Identification and Investigation.

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1100	Intro to Writing/Reading or Intro to Writing for College	5	ENG 1102	Writing/Researching the Essay	4
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List C	3
MTH 1750	College Algebra	3	MTH 2001	Probability & Statistics I	3
USS 1000	Undergraduate Student Success	2	GEO 1110	Fundamentals of Geography	3
			List A HHP	Physical Activity	1
		13			14
Sophomore			Sophomore		
BIO 1801	Fundamentals of Biology	4	PHY 1183	Introductory Astronomy	2
CHM 1050	Chemical Concepts	3	EDU 2600	Intro to Teacher Education	3
EDU 2500	Professional Education Seminar	2	ELECTIVE	From List C *EDU 2300 Educational Psychology	3
MTH 2502	Calculus I	4	GEL 1101	Physical Geology	4

EDU 3265	Educational Technology	3			
		16			12
Junior			Junior		
EDU 3263	Classroom Management/Field	3	EDU 3266	Individual w/Special Needs	3
EDU 2200	Intro to the Teaching of Reading	3	EDU 3264	Multicultural Education	3
EDU 3310	Language & Literacy	3	ELECTIVE	From List D	3
MTH 3000	Geometry for Teachers	3	EDU 3320	Phonics & Reading	3
PHY 2611	College Physics I	4	ELECTIVE	From List B	3
		16			15
Senior			Senior		
EDU 3372	MCE/ AYA Science Methods/Field	3	ELECTIVE	From List B	3
EDU 3325	Measurement & Assessment	3	EDU 3362	MCE/ AYA Math Methods/Field	3
GEO 3313	Weather and Climate	3	ELECTIVE	From List D	3
EDU 3330	Reading in the Content Area	3	MTH 2503	Calculus II	5
		12			14
5th Year					
EDU 4491	Student Teaching	9			
EDU 4895	Capstone Seminar	3			
		12			

Educational Studies Program
Student Responsibility
Candidates in the Program are required to meet regularly with their advisor. Candidates are required to comply with all regulations stipulated by the Department of Professional Education and Music. Though expected to seek academic advisement and guidance, candidates are ultimately responsible for satisfying all degree and licensure preparation requirements. Candidates, in consultation with their advisor, must submit an application for graduation at a time stipulated by the Department and the University.

Educational Studies Capstone
The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection for EDU 3263, EDU 3264, EDU 3266. Students are required to complete 20 hours of observation, (in person or virtual). Successful completion of all Educational Studies Capstone is required for graduation.

Program Requirements
To pursue a major in the Educational Studies Program complete content and pedagogy courses and Educational Studies Capstone (see Suggested Program of Study). A cumulative grade point average of 2.00 is required for graduation. Candidates must maintain a cumulative grade point average of 2.00 for graduation. A grade of less than "C" in any content, professional education course or program electives will not be accepted.

Candidate Monitoring

The Unit Assessment System collects data that are analyzed to monitor candidates' academic progression from admission through successful completion of the Program. Data on candidates' progression are collected at various points including different Program delivery, different Program courses, and Educational Studies Capstone.

BACHELOR OF SCIENCE IN Education - Educational Studies- ENG 1100 or ENG 1101 and ENG 1102; MTH 1550 or MTH 1750; HIS 1110 or HIS 1121 or 1122 plus 3 humanities credit hours from List B; Social and Behavioral Sciences - 6 hours from 2 different disciplines from List C; Natural and Physical Sciences- 6 credit hours from 2 different disciplines from List D, USS 1000, 5-6 hours electives and 1 credit hour of Physical Activity from List A. The following Professional Education course requirements: EDU 2200, EDU 2300, EDU 2500, EDU 2600, EDU 3263, EDU 3264, EDU 3266, EDU 3325, EDU 4990, and select from 36 credit hours from level 2000 or 3000 and 15 hours from 4000 level courses.

The curriculum below is to be used in consultation with the student's advisor. The student must be familiar with the University requirements, the General Education Requirements, and Special Requirements for the above degree.

Special Note: This Degree does NOT lead to teaching licensure.

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1100	Intro to Writing Reading for College	5	ENG 1102	Writing/Researching the Essay	4
MTH 1550 or MTH 1750	Modern Applications of Mathematics or College Algebra	3	ELECTIVE	From List C	3
HIS 1XXX	1100, 1121 or 1122	3	ELECTIVE	From List B	3
USS 1000	Undergraduate Student Success	2	ELECTIVE	From List D *From two different areas	3
EDU 2600	Intro to Teacher Education	3	EDU 3265	Educational Technology	3
		16			16
Sophomore			Sophomore		
EDU 2500	Professional Education Seminar	2	ELECTIVE	From List D	3
EDU 3264	Multicultural Education/Field	3	EDU 2200	Intro to Teaching Reading	3
EDU 2300	Educational Psychology	3	ELECTIVE	From List B	3
ELECTIVE	Education Elective	3	ELECTIVE	Education Elective	3
MAJOR	2000 or 3000 Level Content Course	3	HHP 1000	Health and Wellness	2
ELECTIVE	From List C	3	EDU 3266	Individuals w/Special Needs	3
		17			17
Junior			Junior		
MAJOR	2000 or 3000 Level Content Course	3	MAJOR	2000 or 3000 Level Content Course	3
MAJOR	2000 or 3000 Level Content Course	3	MAJOR	2000 or 3000 Level Content Course	3
MAJOR	2000 or 3000 Level Content Course	3	MAJOR	2000 or 3000 Level Content Course	3
MAJOR	2000 or 3000 Level Content Course	3	MAJOR	2000 or 3000 Level Content Course	3
EDU 3325	Measurement & Assessment	3	EDU 3263	Classroom Management/Field	3
		15			15
Senior			Senior		
MAJOR	2000 or 3000 Level Content Course	3	MAJOR	4000 Level Content Course	3
MAJOR	2000 or 3000 Level Content Course	3	MAJOR	4000 Level Content Course	3
MAJOR	2000 or 3000 Level Content Course	3	MAJOR	4000 Level Content Course	3

MAJOR	4000 Level Content Course	3	EDU 4990	Capstone Seminar	3
MAJOR	4000 Level Content Course	3			
		15			12

School of Agricultural Education and Food Science

The School of Agricultural Education and Food Science was established in 2016. The Agricultural Education degree programs were first offered in the Fall 2017.

PURPOSE: To prepare diverse Agricultural Educators.

BY: Providing diverse experiences to students with diverse backgrounds

IN ORDER TO:

1. Address the immediate shortage of qualified/credentialed agricultural educators in existing agricultural programs
2. Provide qualified/credentialed agricultural educators to address the demand for future programs in urban areas
3. Address the need for a global agricultural perspective
4. Provide students with skills to be successful in the Agricultural Industry.

DEGREE PROGRAMS

B.S. in Agriculture Education (Extension Pathway non-licensure):

The extension pathway to a Bachelor of Science in Agricultural Education will have students plan and deliver effective instruction that advances the learning of individuals interested in agriculture and agricultural issues. Students will be prepared to work in careers requiring the skills necessary to train and develop others, including adult education and youth leadership development. Students who complete the requirements for the degree pathway will obtain a Bachelor of Science in Agricultural Education and a Minor in Sustainable Agriculture.

ONLINE Agricultural Education Extension Certificate - 30 hours

The 30-semester hour online certificate is a selection of courses also needed in the B.S. degree program designed to give non- degree seeking students and foundation to build skills in providing Agricultural Education programs in a non-formal setting.

B.S. in Educational Studies

Students pursuing a degree in Educational Studies in the Professional Education and Music Department may choose to complete the 30-semester hour Agricultural Education Extension Certificate the content hours completed will apply to the completion of the Educational Studies degree.

B.S. in Agricultural Education (Agriscience Licensure Pathway):

The primary role of this program is to prepare diverse agricultural educators, address the need for a global agriculture perspective and meet the demand for qualified and credentialed agricultural educators for expanding high school Agriscience programs in existing and underserved areas. Students who complete the requirements of the degree pathway will obtain a Bachelor of Science in Agricultural Education with a Minor in Sustainable Agriculture and earn a Secondary Ohio Teaching License in Agriscience for grades 7-12.

Teaching Licensure Requirement (Licensure Path only)

To pursue a teaching license in the Agricultural Education Program, candidates are admitted to Educator Preparation Program (EPP) complete content and pedagogy courses and all clinical experiences (see suggested. The following information is about admission to EPP.

ADMISSION TO EPP REQUIREMENTS

Admission to the Educator Preparation Program is required before candidates can enter a major in the Educator Preparation Program and enroll in upper-level education courses. To be eligible to submit an admission application, candidates must satisfy the following requirements:

1. Submit acceptable Admissions Application
2. Earn a minimum GPA of 2.75 (Transfer Students after 12 semester credit hours.)
3. Earn a minimum of 32 hours in general education courses (20 hours for Music)
4. **Out-of-state** students are required to have a clear BCII/FBI Check Results or school district verification form and Meet Basic Academic Skills;
5. **In-State (Ohio)** students are required to have a 3-Year Pre-Service Teacher Permit. The permit is required for **Ohio** candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Competency on one of the following below:

- **High School/CCP GPA of 2.75 or higher**, grades C or higher in MTH 1550/1750 and ENG 1100/1101 and ENG 1102 *(if ACT or SAT scores are not met)*
  -OR-
- **Community College GPA of 2.75 or higher.** Must have completed 60 or more credit hours, grades C or higher, in MTH 1550/1750 and ENG 1100/1101 and ENG 1102
  -OR-
- **College/University GPA of 2.75 or higher.** Must have completed 60 or more credit hours, grades C or higher, in MTH 1550/1750 and ENG 1100/1101 and ENG 1102
  -OR-
  ACT
  - ACT Reading $\geq$ 21.25
  - ACT Writing $\geq$ 6.60
  - ACT Math $\geq$ 21.25

  -OR-

SAT, Combined Reading, Writing, and Math Score $\geq$ 860

CONCEPTUAL FRAMEWORK

The Educator Preparation Program is undergirded by the Conceptual Framework. The theme of the Conceptual Framework is: *Preparing Reflective Educators Who Practice Evidence-based Instruction by Advocating and Demonstrating Appropriate Learning Strategies for Diverse Student Populations*. The Conceptual Framework has three elements that define the content and clinical experiences that comprise the design of educator preparation at Central State University. The three Elements are: Knowledge, Practice and Professionalism. Teacher candidates are prepared to engage in reflective practice that incorporates the psychological, cultural, social, and economic factors that impact students' learning.

Program Requirements

To pursue a major in the Agricultural Education Program, candidates are admitted to Educator Preparation Program (EPP), complete content and pedagogy courses and all clinical experiences (see suggested program of study). A cumulative grade point average of 2.75 is required for admission. Candidates must maintain at least a cumulative grade point average of 2.75 for graduation. Candidates must satisfactorily complete the Ohio Assessments for Educators (OAE) before admission to Student Teaching is approved. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted. In addition, candidates who reside outside Ohio, must submit to TEAP-C the results of a current BCII/FBI background check or current employee verification form that clears the candidate for Program participation. Each background check is valid for one calendar year. The 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already

hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Field and Clinical Experiences

The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection; Level 2 - application of methods strategies practicum; and Level 3 - Student Teaching Clinical. Successful completion of all Field and Clinical experiences is required for graduation. Candidates should consult the appropriate Suggested Program of Study to identify those courses that require fieldwork. The EPP has collaborative partnerships and Memorandums of Understanding with local school districts and more than 100 school districts across the continental United States. Candidates should contact director of Field and Clinical experiences. As of July 1, 2024, the 3-Year Pre-Service Teacher Permit is required for candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit.

Candidate Monitoring

The Unit Assessment System collects data that is analyzed to monitor candidates' academic progression from admission through successful completion of the Program. Data on candidates' progression are collected at various points of Program delivery, including different Program courses, Field Experiences and Student Teaching.

Once a student has been admitted to the Education Preparation Program (EPP), Students must demonstrate competency on the Ohio Assessment for Educator Exam in order to pursue the Secondary 7-12, or 4-9 Ohio Teaching License issued by The Ohio Department of Education. Competency on these exams is demonstrated by meeting the state benchmark on the following assessments:

OAE Pedagogy Assessment

AGED 4100. A grade of less than "C" in any content, professional education course or clinical experience will not be accepted.

OAE Content Assessment

005 Agriscience
As part of the pathway completion, Students will complete related courses to prepare them for the exam. Including, AGB 2300, AGR 3120, AGR 3250, AGR 1150, AGR 1220, AGR 2450, AGR 2150, and AGED 3110.

Ohio Assessments for Educators (OAE) Assessment of Professional Knowledge Assessment of Content Knowledge

The OAE assesses candidates' mastery of professional knowledge and content knowledge. Passing scores are required before placement in Student Teaching and Program completion. Detailed information about the OAE is available at http://www.oh.nesinc.com. Additional information and supplemental instruction sessions are provided by TEAP-C. Candidates are encouraged to consult with TEAP-C to prepare for successful completion of the OAE requirement.

Student Responsibility

Candidates in the Program are required to meet regularly with their advisor. Candidates are required to comply with all regulations stipulated by the University, the EPP and the Professional Education program. Though expected to seek academic advisement and guidance, candidates are ultimately responsible for satisfying all degree and licensure requirements.

Candidates, in consultation with their advisor, must submit an application for graduation at a time stipulated by the Department and the University.

Transfer Options:
The School of Agricultural Education maintains transfer agreements with Community Colleges and Technical Schools with Associate Degree Programs in agriculture related fields.

Current Transfer Agreements include:

- Clark State College; Springfield, Ohio: A.A.B Agribusiness to B. S in Agricultural Education
- Edison State Community College - Greenville, Ohio: A.A.S Agriculture to B.S in Agricultural Education
- Hocking College - Logan, Ohio: A.A.S Agroecology to B. S in Agricultural Education
- Northwest State Community College - Archbold, Ohio A.A.S in Agronomy or Agribusiness to B.S in Agricultural Education
- Bahamas Agricultural and Marine Science Institute - North Andros, Bahamas - A.A.S Agriculture to B.S in Agricultural Education.

***BACHELOR OF SCIENCE IN Agricultural Education* w/Agriscience Licensure** - General Education Requirements - USS 1000 (Exempt if transferring with 31 or more semester hours), Activity Elective -List E (Exempt if over the age of 25); ENG 1101, ENG 1102; MTH 2500 OR MTH 2501 (Pre-Req MTH 1750); HIS 1110, HIS 1121, OR HIS 1122 and Humanities and Fine Arts - List B; EDU 2300 and Social and Behavior Science- List C; CHM 1201; PHY 2611.
Major Requirements 6-8 Semester Hours of Biology (BIO 1705; BIO 1801, OR BIO 1801;1802, OR BIO 1801; BIO 2650) AGR 1150, AGR 1220, AGR 2150, AGR 2450, AGB 2300; AGR 3250; AGED 3110; AGED 4110; AGED 4100; EDU 2600; EDU 3265; EDU 3330; EDU 3263; EDU 3264; EDU 3266; EDU 4491; EDU 4895, additional agriculture related electives; Minimum 120 Semester hours.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE
MAJOR IN AGRICULTURAL EDUCATION - AGRISCIENCE
LICENSURE PATHWAY

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Intro to Writing for College	4	ENG 1102	Writing/Researching the Essay	4
MTH 2500 or MTH 2501	Precalculus or Trigonometry	3	HIS 1XXX	1100, 1121 or 1122	3
BIO 1750 or BIO 1801	Biological Concepts or Fundamentals of Biology I	4	AGR 1220	Intro to Horticulture	4
AGR 1150	Intro to Sustainable Agriculture	3	BIO 1801 or BIO 1802	Fundamentals of Biology I or Fundamentals of Biology II	4
USS 1000	Undergraduate Student Success	2	HHP 1XXX	From List A	1
		16			16
Sophomore			Sophomore		
ELECTIVE	From List B, C, or D	3	ELECTIVE	From List B, C, or D	3
CHM 1201	General Chemistry w/Lab	4	PHY 2611	College Physics	4
PSY 1200 or SOC 1105	Intro to Psychology or Intro to Sociology	3	ELECTIVE	AGR Elective	3
AGB 2300	Intro to AG Business	3	EDU 2300	Educational Psychology	3
EDU 2600	Intro to Teacher Education	2	EDU 3265	Educational Technology	3
		15			16
Junior			Junior		
AGED 3110	Agriscience Foundations	3	EDU 3263	Classroom Management/Field	3
EDU 3330	Reading in the Content Area	3	EDU 3266	Individuals w/Special Needs	3
EDU 3264	Multicultural Education	3	AGED 4110	Student Leadership Organizations	3
AGR 2150	Intro to Animal Science	4	ELECTIVE	AGR Elective	3
AGR 2450	Soil Science	4	ELECTIVE	AGR Elective	3
		17			15
Senior			Senior		
AGED 4100	Methods of Teaching Agriculture Education	3	EDU 4491	Student Teaching	9

AGR 3250	Grain Crops	4	EDU 4895	Capstone	3
AGR 3120	Ag Machines and Mech	3			
ELECTIVE	From List B	3			
		13			12

BACHELOR OF SCIENCE IN Agricultural Education - Extension Pathway (non-licensure)

General Education Requirements - USS 1000 (Exempt if transferring with 31 or more semester hours), Activity Elective -List E (Exempt if over the age of 25); ENG 1101, ENG 1102; MTH 2500 OR MTH 2501 (Pre-Req MTH 1750); HIS 1110, HIS 1121, OR HIS 1122 and Humanities and Fine Arts List B; EDU 2300 and Social and Behavior Science- List C; CHM 1201; PHY 2611. Major Requirements 6-8 Semester Hours of Biology (BIO 1705; BIO 1801, OR BIO 1801;1802, OR BIO 1801; BIO 2650) AGR 1150, AGR 1220, AGR 2150, AGR 2450, AGB 2300, AGR 3120; AGR 3250; *AGED 2200, AGED 3110; AGED 3115; AGED 4300; AGED 4500- Extension Internship I&2 (12),*
additional combination of AGED and AGR electives. Minimum 120 Semester hours

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE
MAJOR IN AGRICULTURAL EDUCATION EXTENSION PATHWAY
NON-LICENSURE

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Intro to Writing for College	4	ENG 1102	Writing/Researching the Essay	4
MTH 2500 or MTH 2501	Precalculus or Trigonometry	3	HIS 1XXX	1100, 1121 or 1122	3
BIO 1750 or BIO 1801	Biological Concepts or Fundamentals of Biology I	4	AGR 1220	Intro to Horticulture	4
AGR 1150	Intro to Sustainable Agriculture	3	BIO 1801 or BIO 1802	Fundamentals of Biology I or Fundamentals of Biology II	4
USS 1000	Undergraduate Student Success	2	HHP 1XXX	From List A	1
		16			16
Sophomore			Sophomore		
ELECTIVE	From List B, C, or D	3	ELECTIVE	From List B, C, or D	3
CHM 1201	General Chemistry w/Lab	4	PHY 2611	College Physics	4
PSY 1200	Intro to Psychology	3	ELECTIVE	AGR Elective	3
AGB 2300	Intro to AG Business	3	EDU 2300	Educational Psychology	3
EDU 2500	Professional Education Seminar	2	EDU 3265	Educational Technology	3
		15			16
Junior			Junior		
AGED 3110	Agriscience Foundations	3	AGED 3100	The Adult Classroom	3
COM 2219 Or COM 2214	Intro to Media Writing or Public Speaking	3	PSY 2220	Human Growth and Development	3
AGED 3115	Addressing Diverse Populations in Agriculture	3	AGED 4110	Student Leadership Organizations	3
AGR 2150	Intro to Animal Science	4	ELECTIVE	AGR Elective	3
AGR 2450	Soil Science	4	ELECTIVE	AGR Elective	3
		17			15
Senior			Senior		

AGED 4100	Method of teaching Agriculture	3	COE 4499	Alternative Cooperative Experience	12
AGR 3250	Grain Crops	4			
AGR 3120	Ag Machines and Mech	3			
ELECTIVE	From List B	3			
		13			12

Approved Electives to satisfy the B.S. in Agricultural Education

Choose a minimum of 8 credits from approved agricultural electives, Other electives may meet elective requirement with approval of Director/ Department Chair

AGED 1010	Community Advocacy (I: 3)
AGED 3100	The Adult Classroom
AGED 3200	Plan, Conduct and Advocate for Community Ag Ed. II (3)
AGED 4110	Student Leadership Organizations
AGED 4100	Methods of Teaching Agriculture Education
AGED 4500	Agricultural Education Extension Internship III (I, II, III, 6)
AGED 4500	Agricultural Education Extension Internship IV (I, II,III, IV, 6)
AGR 1250	Principles of Precision Agriculture (I; 3)
AGR 2340	Careers in Sustainable Agriculture (I; 1)
AGR 2350	Community Agriculture (II, III; 3)
AGR 3450	Agriculture Extension (II; 3)
AGR 4350	Principles of Integrated Pest Management (I; 4)
AGR 4430	Topics in Sustainable Agriculture (On Demand; 3)
AGR 4500	Internship in Sustainable Agriculture (I, II, III; 2)
AGR/WRM 3308	Environmental Law (II; 3)
AGR/WRM 3330	Soil and Water Conservation (II; 4)
AGR/WRM 3335	Irrigation and Drainage (I; 3)
AGR/WRM 4406	Agricultural Development (I; 3)
AGB 3220	Agricultural Marketing (I; 3)
AGB 3240	Farm Management (II; 3)
AGB 3415	Agricultural Finance (I; 3)
AGB 4445	Agricultural Economics (II; 3)
AGB 4745	Agricultural Policy (II; 3)

TEACHER EDUCATION ADVISEMENT AND PARTNERSHIP CENTER

The Teacher Education Advisement and Partnership Center (TEAP-C) is a support unit within the Department of professional Education and Music that fosters candidate retention and timely graduation. The Center's primary purpose is to provide services to candidates as they complete their programs of study. Admission to Educator Preparation is coordinated by TEAP-C. Candidates seeking admission are advised and monitored by TEAP-C staff throughout the process. Specifically, the Center:

1. Assists candidates in academic planning from enrollment to program admission.
2. Advises candidates on selection of teacher education major, course scheduling, and career goals.
3. Plans and coordinates activities to strengthen candidates' academic skills.
4. Prepares and distributes information regarding the availability of appropriate University resources.
5. Provides supplemental materials that assist candidates in satisfying professional testing requirements (Ohio Assessments for Educators.)
6. Maintains program admission records of candidates enrolled in Educator Preparation Programs

ADMISSION TO EPP REQUIREMENTS

Admission to the Educator Preparation Program is required before candidates can enter a major in the Educator Preparation Program and enroll in upper-level education courses. To be eligible to submit an admission application, candidates must satisfy the following requirements:

1. Submit acceptable Admissions Application
2. Earn a minimum GPA of 2.75 (Transfer Students after 12 semester credit hours.)
3. Earn a minimum of 32 hours in general education courses (20 hours for Music)
4. **Out-of-state** students are required to have a clear BCII/FBI Check Results or school district verification form and Meet Basic Academic Skills;
5. **In-State (Ohio)** students are required to have a 3-Year Pre-Service Teacher Permit. The permit is required for **Ohio** candidates who are enrolled in educator preparation programs to complete student teaching or other training experience involving students in P-12 schools. Note that candidates who already hold an active credential issued by the State Board of Education, such as a substitute teaching license or educational aide permit, are not required to obtain this permit. For more information about BCII/FBI background checks, candidates should contact their advisors and/or TEAP-C.

Competency on one of the following below:

- **High School/CCP GPA of 2.75 or higher**, grades C or higher in MTH 1550/1750 and ENG 1100/1101 and ENG 1102 *(if ACT or SAT scores are not met)*
  -OR-
- **Community College GPA of 2.75 or higher.** Must have completed 60 or more credit hours, grades C or higher, in MTH 1550/1750 and ENG 1100/1101 and ENG 1102
  -OR-
- **College/University GPA of 2.75 or higher.** Must have completed 60 or more credit hours, grades C or higher, in MTH 1550/1750 and ENG 1100/1101 and ENG 1102
  -OR-
  ACT
  - ACT Reading $\geq$ 21.25
  - ACT Writing $\geq$ 6.60
  - ACT Math $\geq$ 21.25

  -OR-
- **SAT**, Combined Reading, Writing, and Math Score $\geq$ 860

OFFICE OF FIELD AND CLINICAL EXPERIENCES

Clinical experiences are a critical component of the preparation of future teachers. The experiences serve as opportunities for candidates to develop their teaching skills as they enhance their understanding of the teaching profession. Clinical experiences also provide the opportunity to assess the candidates' mastery of pedagogy and content knowledge, and their emerging professionalism as evidenced through the development of professional dispositions. Students should consult the *Educator Preparation Handbook* for additional information.

After admission to the Educator Preparation Program (EPP), candidates are eligible to take required method courses for their major. Candidates participate in field experiences that introduce the practical aspects of the teaching profession. The field work requirements provide candidates with sequentially designed, performance-based experiences that 1) allow candidates to develop an understanding of the role of the classroom teacher as presented from the teacher's perspective; 2) allow candidates to realize the connection of theory to the practical application; and 3) allow candidates to develop teaching competencies through actual classroom application and practice. Field Work requirements are connected to individual courses in the professional education sequence (See Course Description section to identify professional education courses that require field work assignments). Further information regarding field work assignment and placements is provided during candidates' enrollment in the applicable professional education courses.

CSU requires students to have a variety of field experiences. The Program requires three levels of field and clinical experiences in the appropriate school setting: Level 1 - observation and data collection; Level 2 - application of methods strategies practicum; and Level 3 - Student Teaching Clinical. Successful completion of all Field and Clinical experiences are required for graduation.

Level 1- Observation: Candidates participate in field observation experiences that introduce the practical aspects of the teaching profession. The fieldwork requirements provide candidates with experiences that may include developing an understanding of the role of the classroom teacher as presented from the teacher's perspective; realizing the connection of theory to the practical application.

Level 2 – Methods: During the semester, candidates are placed in a grade 7 -12 classroom to complete **sixty** hours of field experience. Under the guidance of cooperating teachers and university faculty, teacher education candidates develop instructional plans, teach individual lessons and units to small and large groups, utilize pre/post assessments, collect data on student learning, and prepare the written analysis of data and written reflection. During these experiences, candidates are provided with opportunities to further develop content, professional, and pedagogical knowledge, skills, and dispositions.

Level 3 - Student Teaching consists of a minimum of 12 weeks in a grade 7 – 12 state-accredited school classroom. The purpose of the student teaching experience is to provide opportunities for candidates to develop, refine and evaluate their pedagogical skill level. Each candidate is given the opportunity to:

- apply and test professional knowledge and skills;
- participate in and assume responsibility for teacher activities;
- develop both personal and professional competence under typical classroom/school conditions;
- evaluate readiness to enter the profession;
- prepare to meet the demands faced by beginning teachers; and
- develop skills in reflective decision-making.
-

Student Teaching is the capstone event of the teacher education process. Twelve to fifteen weeks of clinical experience through Student Teaching are required. The student teaching experience places candidates under the direct supervision of both the University supervisor and the classroom teacher. During the Student Teaching experience, opportunities are provided for candidates to bridge theory and practice in the professional setting that is authentic, real life, and real time. As the culminating requirement of the teacher preparation program, candidates are provided guidance as they demonstrate their mastery of the professional expectations and requirements of being an effective teacher. Also, as mastery is demonstrated, candidates are provided the results of constructive assessments throughout the process.

ADMISSION TO STUDENT TEACHING

To be approved for Student Teaching, candidates must have been previously admitted to the Educator Preparation Program and completed all required coursework. Specifically, for admission to Student Teaching, candidates must satisfy the following requirements:

1. Minimum 2.75 GPS required; 3.0 preferred;
2. All other course work completed as included on the suggested Program of Study;
3. Passing scores on Ohio Assessment for Educators (OAE) required for program of study (see EPP Handbook);
4. Current and acceptable BCII/FBI background check that clears the candidate to enroll in Student Teaching;
5. A completed Special Needs Accommodation Form, if applicable;

Candidates are encouraged to contact their advisor for additional information and directions on applying for Student Teaching.

MUSIC PROGRAM

The Department of Professional Education and Music offers majors in the disciplines of education and music. In addition to its primary role of providing professional and pre-professional training to its majors and minors, the department serves as a major cultural center and resource for the University and offers a wide range of concerts, performances, exhibitions, lectures, and courses which promote the aesthetic development of the community.

Central State University is an accredited institutional member of the National Association of Schools of Music and offers programs leading to the following degrees: Bachelor of Music in Jazz Studies, the Bachelor of Music in Music Education, the Bachelor of Music in Performance, and (eff. Spring 2025) the Bachelor of Arts in Music Technology. We also offer a certificate in Commercial Music and Music Technology. All majors and minors in the department are expected to participate in co-curricular organizations and/or activities of respective programs (e.g., art exhibits, concerts, student organizations, professional organizations, etc.).

All majors in the department must fulfill the General Education Requirements as stated in the degree requirements below (which vary depending upon the degree) and the specific requirements of the college in which the student is enrolled. Students enrolled in teacher education degree programs must apply to the Educator Preparation Program. Students are responsible for knowing and adhering to published schedules for the administration of the above tests and for applying for graduation.

MUSIC

PURPOSE

The purpose of the Music Unit is to cultivate capable and qualified music educators; train proficient and professionally viable classical musicians; and teach the traditions, techniques, and history of jazz music.

MISSION

The mission of this music unit is to prepare a diverse group of learners for success in performance, education, and music technology by readying them for graduate studies or today's job market. Through rigorous study in the music core, graduates are ready to be effective K-12 teachers, classical and jazz performers, and commercial artists. The unit promotes the music of underrepresented composers and arrangers and equips students to successfully navigate diverse working environments. The music faculty seek to maintain a high level of performance and scholarly activity in their respective areas. Teaching, performing, and scholarly activity occur live on campus, in various venues throughout the nation, and online.

SPECIAL REQUIREMENTS FOR MUSIC MAJORS

The department publishes a Music Major Handbook containing detailed information about policies and requirements for each music degree. Students must read this information and work with their faculty advisors to ensure that each requirement is fulfilled before graduation.

All music majors must meet the following requirements (other additional requirements specific to each degree are outlined in the Student Handbook):

- The minimum passing grades for principal applied courses and ensembles:
  - For the B.A. in Music Technology (eff. Spring 2025): a grade of “C” or better
  - For the B.M. in Music Education: a grade of “C” or better
  - For the B.M. in Performance: a grade of "B" or better
  - For the B.M. in Jazz Studies: a grade of "B" or better
- Students in the B.M. in Jazz Studies must achieve a grade of "B" or better for *all* jazz studies courses.
- Piano majors are required to pass four credits of secondary applied music or Introduction to Collaborative Piano with a grade of "C" or better to substitute for piano class.
- Students may *not* take any of the following courses more than two times: MUS 1100, Fundamentals of Theory; MUS 1101, Music Theory I; MUS 1102, Music Theory II; MUS 1151, Piano Class I; MUS 1152, Piano Class II; MUS 2271, Jazz Keyboard Harmony I; MUS 2272, Jazz Keyboard Harmony II; MUS 2280, Intro to Music Education; and MUS 3391, Jazz Improvisation I.

- It is the belief of the music faculty that our ensembles are the "flagships" of the university. Therefore, every music major is required to participate in an appropriate ensemble *each* semester while he/she is in attendance at Central State University. Music Education majors are exempt from this requirement during the student-teaching semester. Because of the extraordinary amount of time demanded for Marching Band, MUS 1127, and University Chorus, MUS 1131, students may not participate in both courses unless he or she is given permission by the department chair in consultation with the faculty.
- Jazz majors are required to take two jazz ensembles per semester for two years.
- To satisfy graduation requirements, music education majors are required to register for 4 credit hours of the ensemble that utilizes his/her major applied instrument. T*o meet the department's policy,* music education majors must be registered for 3 additional credit hours, for a total of 7 credit hours of the ensemble that utilizes his/her major applied instrument. Those in music education whose principal applied is piano may elect either a vocal or instrumental major ensemble. Instrumentalists (winds and percussion) in the music education program must have a minimum of 2 semesters in the University Band (Marching Band, MUS 1127) and two semesters in either the Robeson Chamber Winds (MUS 1129) or the Concert Band (MUS 1128). In addition, beginning in Spring 2024, each music education student must have at least one semester of performance in a choral ensemble.
- Music students will not perform as ambassadors of C.S.U. in public without the consent of the faculty.

SPECIAL REQUIREMENTS FOR MUSIC EDUCATION MAJORS

Students enrolled in the Bachelor of Music in Music Education degree program should be aware of the following requirements:

- Students are first enrolled in CHASE and then must apply for acceptance into the Educator Preparation Program before being allowed to fulfill the student teaching requirement.
- Music Education majors must complete the application procedure required by the Educator Preparation Program before being allowed to fulfill the student teaching requirement.
- Music Education majors must complete all requirements of the Teacher Education and Licensure Program as stated by the Ohio Department of Education.
- Music Education majors develop competencies required by the Ohio Department of Education's *Teacher Education and Licensure Standards.* Exact standards for each course are included with the syllabus.
- Music Education majors (except for those students who are piano majors) must pass a piano proficiency exam before they will be allowed to register for Student Teaching.
- Music Education majors must receive department approval to present a Senior Recital (the faculty will listen to the student perform the recital repertory at least two weeks prior to the planned recital date to judge whether the student is prepared) and must pass the Senior Recital requirement before a student will be allowed to register for Student Teaching (exceptions to this will be made only with the approval of the entire department faculty).
- Music Education majors must submit a clinical/field-based experience inventory form documenting the hours the student has been involved in clinical/field-based experience before the student will be allowed to register for Student Teaching.

- ***Bachelor of Music in Jazz Studies ENG*** 1100 or 1101, 1102; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122; USS 1000, 1 credit from HHP
- 1101-1121; 3 credit hours from List B, Humanities; 3 credit hours from List C, Social and Behavioral Sciences; and 3 credit hours from List D, Natural and Physical Sciences. All students must take MUS 1101, 1102, 1151, 1152, 2201, 2202, 2233, 2271, 2272, 2302, 3311, 3312, 3381,
- 3382, 3386, 3391, 3392, 3495, 4341, 4342, 4495; 16 principal applied credit hours; 12 jazz ensemble credit hours; and 8 semesters of MUS 1000. In addition, the student must take 8 credits of electives. A grade of "C" or better is required in all music courses. A grade of "B" or better is required in Principle Applied courses and ensembles.

•CURRICULUM FOR THE DEGREE, BACHELOR OF MUSIC IN JAZZ STUDIES

•The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

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•Minimum hours needed to obtain a Bachelor of Music in Jazz Studies - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Intro to Writing for College	4	ENG 1102	Write & Research the Essay	4
MUS 1101	Music Theory I	5	MUS 1102	Music Theory II	5
MUS 1151	Piano Class I	1	MUS 1152	Piano Class II	1
MUS 1187	Jazz Ensemble	1	MUS 1187	Jazz Ensemble	1
MUS 2210	Jazz Lab Band	1	MUS 1XX2	Principal Applied	2
MUS 1XX1	Principal Applied	2	MUS 2210	Jazz Lab Band	1
USS 1000	Undergraduate Success Seminar	2	MUS 1000	Student Recital	0
MUS 1000	Student Recital	0			
Total		16			14
Sophomore			Sophomore		
HIS XXXX	1110/1121/1122	3	MUS 1187	Jazz Ensemble	1
MUS 1187	Jazz Ensemble	1	MUS 2202	Music Theory IV	5
MUS 2210	Jazz Lab Band	1	MUS 2210	Jazz Band Lab	1
MUS 2201	Music Theory III	5	MUS 3392	Jazz Improvisation II	2
MUS 2271	Jazz Keyboard Harmony I	2	MUS 2272	Jazz Keyboard Harmony II	2
MUS 2XX1	Principal Applied	2	MUS 2XX2	Principal Applied	2
MUS 3391	Jazz Improvisation I	2	MUS 1000	Student Recital	0
MUS 1000	Student Recital	0			
Total		16			13
Junior			Junior		
MUS 1000	Student Recital	0	MTH 1550	Modern Applications of Math	3
MUS 1187 or 2210	Jazz Ensemble or Jazz Lab Band	1	MUS 1187 or 2210	Jazz Ensemble or Jazz Lab Band	1
MUS 3381	Music History I	3	MUS 3382	Music History II	3
MUS 3386	Ethnomusicology	2	MUS 3XX2	Principal Applied	2
MUS 3XX1	Principal Applied	2	MUS 4342	Counterpoint	2
MUS 4341	Form and Analysis	2	MUS 3495	Junior Recital	0
	List B Elective	3	MUS 1000	Student Recital	0
	Elective	3	MUS 2233	History of Jazz	3
				Elective	2
Total		16			16

Senior			Senior		

- ***Bachelor of Music in Music Education*** Students in the music education program must take the following general education requirements: ENG 1100 or 1101, 1102; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122; USS 1000, 1 credit hour from HHP 1101-1121. For the List B Humanities elective, the student must take MUS 3381. For the List C Social and Behavioral Sciences elective, the student must take EDU 2300. For the List D, Natural and Physical Science elective, the student must take 3 credits.
- All students in this degree must take: MUS 1101, 1102, 1151, 1152, 1200 2201, 2202, 2226, 2228, 2229, 2230, 2231, 2251, 2252, 2280, 3341, 3342 or 3343, 3375 or 4477, 3376, 3382, 3386, 3482, 3495, 4476, 4482, 4495, 14 principal applied credit hours; 4 ensemble credit hours; and 7 semesters of MUS 1000. Also, EDU 2600, 3264, 3266, 3330, 4491, and 4895. A grade of "C" or better is required in all music courses.

•CURRICULUM FOR THE DEGREE, BACHELOR OF MUSIC IN MUSIC EDUCATION

•The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

•Minimum hours needed to obtain a Bachelor of Music in Music Education degree - 124

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	MUS 1000	Student Recital	0
MUS 1000	Student Recital	0	MUS 1102	Music Theory II	5
MUS 1101	Music Theory I	5	MUS 1152	Piano Class II	1
MUS 1151	Piano Class I	1	MUS 1XX2	Principal Applied	2
MUS 1XX1	Principal Applied	2	MUS XXXX	Ensemble	1
MUS XXXX	Ensemble	1	MTH 1550	Modern Applications of Math	3
Total		15			16
Sophomore			Sophomore		
HIS XXXX	1110/1121/1122	3	EDU 2300	Ed Psychology - List C Elective	3
MUS 2228	Brass Class	1	MUS 1000	Student Recital	0
MUS 2230	Voice Class	1	MUS 2231	Woodwind Class	1
MUS 1000	Student Recital	0	MUS 1200	Intro to Music Technology	3
MUS 2201	Music Theory III	5	MUS 2202	Music Theory IV	5
MUS 2251	Piano Class III	1	HHP 1XXX	HHP Activity	1
MUS 2280	Introduction to Music Education	3	MUS 2252	Piano Class IV	1
MUS 2XX1	Principal Applied	2	MUS 2XX2	Principal Applied	2
MUS XXXX	Ensemble	1	MUS XXXX	Ensemble	1
Total		17			17
Junior			Junior		
MUS 1000	Student Recital	0	EDU 3266	Ed Exceptional Child	3
MUS 2226	String Class	1	MUS 1000	Student Recital	0
MUS 3341	Beginning Conducting	2	MUS 2229	Percussion Class	1
MUS 3482	Music Methods & Materials: Elementary	3	MUS 3342/3343	Adv Vocal or Instrumental Conducting	2
MUS 3381	Music History I - List B Elective	3	MUS 3376	Instrumental Methods	2
MUS 3386	Ethnomusicology	2	MUS 3382	Music History II	3
MUS 3XX1	Principal Applied	2	MUS 3XX2	Principal Applied	2
EDU 2600	Intro to Teacher Education	3	MUS 3495	Junior Recital	0

			EDU 3264	Multicultural Education	3
Total		16			16
Senior			Senior		

EDU 3330	Reading in the Content Area	3	EDU 4491	Student Teaching	9
MUS 4476	Choral Methods	2	EDU 4895	Capstone Senior	3
MUS 1000	Student Recital	0			
MUS 3375/4477	Band & Orch Lit & Arr or Choral Lit	4 or 2			
MUS 4482	Music Methods & Materials: Secondary	3			
MUS 4XX1	Principal Applied	2			
	List D Elective	3			
MUS 4495	Senior Recital	0			
Total		15 or 17			12

BACHELOR OF MUSIC IN PERFORMANCE - Students must take the following general education requirements: ENG 1100 or 1101 and ENG 1102; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122; USS 1000; 1 credit from HHP 1101-1121; 3 credit hours from Social and Behavioral Sciences; and 3 credit hours from Natural and Physical Sciences; 3 credits from Humanities. All students must take MUS 1101, 1102, 1151, 1152**,** 2201, 2202, 2251, 2252, 3341, 3342 or 3343, 3381, 3382, 3386, 3397, 4341, 4342, 4400, 4497; 24 credit hours in principle applied; 12 credit hours in ensembles; and 8 semesters of MUS 1000. In addition, vocalists must take MUS 3303, MUS 3305, and MUS 4510. Piano majors must take 4 credits of Intro to Collaborative Piano or secondary applied instead of piano class. Instrumental majors must take 10 credits of electives; Vocal majors must take 4 credits of electives. A grade of "C" or better is required in music courses, "B" or better in Principle Applied courses and ensembles.

CURRICULUM FOR THE DEGREE, BACHELOR OF MUSIC MAJOR IN PERFORMANCE

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Music in Performance degree -120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
MTH 1150	Modern Applications of Math	3	HHP 1XXX	HHP Activity	1
USS 1000	Undergraduate Success Seminar	2		List D Elective	3
MUS XXXX	Ensemble	1	MUS 1000	Student Recital	0
MUS 1000	Student Recital	0	MUS 1102	Music Theory II	5
MUS 1101	Music Theory I	5	MUS 1152	Piano Class II	1
MUS 1151	Piano Class I	1	MUS 1XX2	Principal Applied	4
MUS 1XX1	Principal Applied	4	MUS XXXX	Ensemble	1
Total		16			15
Sophomore			Sophomore		
MUS 1000	Student Recital	0	MUS 1000	Student Recital	0
MUS 2201	Music Theory III	5	MUS 2202	Music Theory IV	5
ENG 1101	Introduction to Writing for College	4	MUS 2252	Piano Class IV	1
MUS 2251	Piano Class III	1	MUS 2XX2	Principal Applied	4
MUS 2XX1	Principal Applied	4	MUS XXXX	Ensemble	1
MUS XXXX	Ensemble	1	ENG 1102	Writing and Research the Essay	4
	List B Elective	3			
Total		18			15
Junior			Junior		
MUS 1000	Student Recital	0	MUS 1000	Student Recital	0
MUS 3341	Beginning Conducting	2	MUS 3342 or 3343	Advanced Conducting Inst or Choral	2
MUS 3381	Music History I	3	MUS 3382	Music History II	3
MUS 3XX1	Principal Applied	2	MUS 3397	Junior Recital	3
MUS XXXX	Ensemble	1	MUS 3XX2	Principal Applied	2
	List C Elective	3	MUS XXXX	Ensemble	1
MUS XXXX	Ensemble	1	MUS XXXX	Ensemble	1
HIS XXXX	1110/1121/1122	3		ELECTIVE	2
Total		15			14
Senior			Senior		
MUS 1000	Student Recital	0	MUS 4510	Music 4510 (Voice only)	2
MUS 3303	Diction for Singers (Voice only)	2	MUS 3305	Diction for Singers II (Voice only)	2
MUS 3386	Ethnomusicology	2	MUS 1000	Student Recital	0

MUS 4XX1	Principal Applied	2	MUS 4342	Counterpoint	2

MUS 4341	Form and Analysis	2	MUS 4400	Studies in Pedagogy	2
MUS XXXX	Ensemble	1	MUS 4497	Senior Recital	3
MUS XXXX	Ensemble	1	MUS 4XX2	Principal Applied	2
	ELECTIVE	2	MUS XXXX	Ensemble	1
	ELECTIVE (Non-voice majors)	3	MUS XXXX	Ensemble	1
				ELECTIVE (Non-voice majors)	3
Total		12* or 13			14 or 15*

BACHELOR OF ARTS IN MUSIC TECHNOLOGY - Students must take the following general education requirements: ENG 1100 or 1101 and ENG 1102; MTH 1550; HIS 1110 or HIS 1121 or HIS 1122; USS 1000; 1 credit from HHP 1101-1121; 6 credit hours from Social and Behavioral Sciences; and 7 credit hours from Natural and Physical Sciences; 9 credits from Humanities. All students must take MUS 1100, 1151, 1200, 1301, 2301, 2302, 2810, 3320, 3325, 3326, 3327, 3330, 4325, 4410; 12 credit hours in principle applied; 5 credit hours in ensembles; and 8 semesters of MUS 1000. A grade of "C" or better is required in music courses

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CURRICULUM FOR THE DEGREE, BACHELOR OF ARTS MAJOR IN MUSIC TECHNOLOGY (eff. Spring 2025)

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Music in Performance degree - 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
USS 1000	Undergraduate Success Seminar	2		List D Elective	4
MUS 1000	Student Recital	0		HHP Activity	1
MUS 1100	Principles of Theory	5		Humanities Course	3
MUS 1151	Piano Class I	1	MUS 1000	Student Recital	0
MUS 1XX1	Principal Applied	2	MUS 1XX2	Principal Applied	2
MUS 1200	Intro to Music Technology	3	MUS XXXX	Ensemble	1
			MUS 2302	Audio Recording	3
Total		13			14
Sophomore			Sophomore		
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Researching the Essay	4
MUS 1000	Student Recital	0		List B Elective	3
MUS 1301	Navigating the Music Industry	3	MUS 1000	Student Recital	0
MUS 2810	Computer Music Applications	3	MUS 2XX2	Principal Applied	2
MUS 2XX1	Principal Applied	2	MUS XXXX	Ensemble	1
MUS XXXX	Ensemble	1	MUS 2301	Music Publishing, Marketing, and Networking	3
			MUS 3326	Audio Recording II	3
Total		13			16
Junior			Junior		
	List C Elective	3		List C Elective	3
HIS XXXX	1110/1121/1122	3	MTH 1550	Modern Applications of Math	3
	Elective	4		Elective	3

MUS 1000	Student Recital	0	MUS 1000	Student Recital	0
MUS 3320	Sound Reinforcement	3	MUS 3330	Multimedia Audio	3
MUS 3325	Mixing and Mastering I	3	MUS 4325	Mixing and Mastering II	3
MUS XXXX	Ensemble	1	MUS XXXX	Ensemble	1
Total		17			16
Senior			Senior		
	List D Elective	3		Elective	3
	Humanities Course	3		Elective	4
	Foreign Language	4		Foreign Language	4
MUS 1000	Student Recital	0	MUS 1000	Student Recital	0

MUS 4XX1	Principal Applied	2	MUS 4XX2	Principal Applied	2
MUS 3327	Digital Audio Editing	3	MUS 4410	Comm. Music and MT Practicum	3
			MUS 4495	Senior Recital	0
Total		15			16

JOHN W. GARLAND COLLEGE OF ENGINEERING, SCIENCE, TECHNOLOGY AND AGRICULTURE

Dr. Arunasalam Rahunanthan, Interim Dean

The College is home of the 1890 Land-Grant mission of the University and offers 10 programs in the Science, Technology, Engineering, Agriculture and Mathematics (STEAM) areas. In addition, by offering courses to support the General Education program, the College provides students with a broad foundation in modern computer literacy, sciences, and mathematics. The guiding principle of the mathematics and science components of General Education is that each person who graduates from college should possess the ability to understand the impact of science on life in general, especially the guardianship of environment and natural resources for a sustainable future. The General Education curriculum offered by the College of Science and Engineering is unique with the inclusion of courses on water resources and natural disasters.

The College comprises three departments – Agricultural and Life Sciences, Mathematics and Computer Science, and Engineering and Technology. Undergraduate degree offerings include Biology, Chemistry, Environmental Engineering, Industrial Technology, Manufacturing Engineering, Mathematics, and Computer Science, Sustainable Agriculture, Exercise Science and Water Resources Management. The College also includes two centers: the Center for Excellence in Emerging Technologies (CEET), designated by the State of Ohio and the Center for International Water Resources Management. In addition to the major programs in the STEAM areas, the College also offers minors in Biology, Chemistry, Computational Science, Environmental Science and Nuclear Engineering. The College offers numerous opportunities for students for scholarships and internships during the years of matriculation and facilitates graduate school placement for students aspiring further education in their respective fields. The College has numerous articulations with community colleges in Ohio for students with associate degrees in the STEAM areas to pursue a 4- year degree at CSU in selected fields.

ADMISSION REQUIREMENTS

Freshmen students are admitted to the John W. Garland College of Engineering, Science, Technology, and Agriculture by declaring an intention to major in one of the ten programs in the STEAM areas. Students transferring from other institutions or transitioning from community colleges may be admitted to their program of choice in any of the departments after conferring with the appropriate chair.

STUDENT RESPONSIBILITY

Students in the John W. Garland College of Engineering, Science, Technology, and Agriculture are required to confer with an assigned faculty advisor within their major, or their Center for Academic Success professional advisor on a regular basis. Beyond this advisement, students are personally responsible not only for selecting their academic programs, but also for adhering to all published regulations and requirements of the University. Students are expected to seek regular academic advisement and ultimately are individually responsible for completing all degree requirements.

During the semester immediately prior to the year in which a student expects to graduate, students must confer both with their advisor and the chair of the major department for a final degree checkout and preparation of an application for graduation. Completed graduation applications are due in the College Dean's office prior to the end of the first semester of the year in which a student expects to graduate in accordance to the University Academic Calendar.

TRANSFER OF CREDITS

Students who transfer from other colleges of the University and from other accredited colleges and universities must

meet with the department chairperson to review and determine the acceptability of transfer credits to the intended degree program. The chairperson may decline to accept the transfer credits for any course which does not meet an approved course description or for which the grade is lower than a "C" or which does not meet the University General Education Requirements.

Students who have completed the Transfer Module at another school will automatically receive credit for Central State's Transfer Module. Such students will, COLLEGE OF ENGINEERING, SCIENCE, TECHNOLOGY AND AGRICULTURE 142, however, be required to meet some additional General Education Requirements not included in the Transfer Module.

DEGREE REQUIREMENTS

The General Education Program, a common curriculum is central to the University's mission of providing students with a liberal arts background. The science and or mathematics requirements of the General Education Program may overlap with the requirements within respective majors in the College and may automatically count towards those requirements. Mathematic requirements for some majors in the college do not include College Algebra and the lowest mathematics course taken will automatically count towards the General Education Mathematics requirement. Students are expected to familiarize themselves with the General Education Requirements through their departmental advisors.

The remaining hours that must be taken to earn a minimum of 120-128 semester hours come from the departmental major requirements and student's choice of free electives. However, majors in the College are urged to choose, with an advisor, courses that provide the student with a second field of interest or a strong minor concentration. Minimum graduation requirements include:

- Completion of at least 124 semester hours with a grade point average of 2.00. Some departments or programs may require additional hours and a higher-grade point average,
- Completion of at least 30 semester hours in a major field. Some departments may require additional hours,
- Completion of the University General Education Requirements.

PREPARATION FOR HEALTH CARE PROFESSIONS

Many students enter college with the intent to pursue a career in a health care field, such as dentistry, medicine, nursing, optometry, pharmacy, or veterinary medicine. All of these careers require entrance exams and additional professional education, not specific undergraduate majors. Since these are popular career paths, admission to professional schools are very competitive. In order to have a good chance of getting into a professional school, a student will need to complete all prerequisite courses in a timely fashion and with good grades. The average student admitted to a medical school has an undergraduate GPA of about 3.5 or better and a score of approximately 510 on the MCAT exam. In addition, many schools will be looking for evidence of commitment to a health care career through volunteer work in hospitals, nursing homes, or animal shelters. Other programs may place emphasis on extracurricular activities.

Medical school admission prerequisites are fairly uniform. Most schools specify one year of each of the following topics (The corresponding CSU courses are listed in parentheses):

1. Biology (BIO 1801, BIO 1802)
2. English (ENG 1101, ENG 1102)
3. General Chemistry (CHM 1201, CHM 1202)
4. Organic Chemistry (CHM 2401, CHM 2402)
5. Mathematics (MTH 2502, MTH 2503)
6. Physics (PHY 2411, PHY 2412)

Some schools also ask for courses in quantitative analysis, biochemistry, anatomy and physiology, and/or genetics. Courses in psychology are also useful. Since most or all these courses would be part of a biology or chemistry major,

many students gain admission to medical schools through those two majors; however, some medical schools have a policy favoring other majors to get more diversity in their student body. Requirements for dental, optometry, pharmacy, or veterinary schools are like those for medical schools. Students are urged to consult the websites of any schools of interest to see what those schools request.

Medical schools also require that applicants take the MCAT exam. (Similar exams are used by dental, optometry, pharmacy and veterinary schools.) A student who plans to enter medical school in the fall immediately after graduation would normally take the MCAT in April of the junior year. Since the MCAT is based on the prerequisite courses listed above, a student should try to complete as many as possible before that time.

The specific sequence of courses a student should take will depend on the student's choice of major and the results of placement exams. The student should work closely with his or her major advisor on scheduling, but regardless of major, a student who wishes to go to medical school needs to complete the admission prerequisite courses by the end of the junior year. Some of these courses need to be done in sequence, so planning is needed. The sequence below is suggested. In addition to the courses listed, a student would need to take courses to meet the General Education and major requirements.

Freshman year: ENG 1101, ENG 1102; BIO 1801, 1802; CHM 1201, CHM 1202; MTH 2502, MTH 2503 (ACT/SAT scores may indicate additional coursework is required ahead of listed courses)

Sophomore year: CHM 2401, CHM 2402; PHY 2411, PHY 2412 (move to junior year if math is not completed)

Junior year: CHM 4300; PSY 1200, PSY 2220 (recommended General Education courses)

Each of the health care professions has an association of its professional schools. These associations have websites that will also provide useful information.

- American Association of Colleges of Osteopathic Medicine (http://www.aacom.org)
- American Dental Education Association (https://adea.org/dentalschools/)
- American Council on Pharmaceutical Education (http://www.acpe-accredit.org)
- American Nurses Association (http://nursingworld.org)
- Association of American Medical Colleges (http://www.aamc.org)
- Association of American Veterinary Medical Colleges (http://www.aavmc.org)
- Association of Schools and Colleges of Optometry (https://optometriceducation.org/

Partnerships and articulation agreements between Central State University and Northeast Ohio Medical University, Cleveland State University and University of Cincinnati are in place to help students to be admitted to medical, pharmacy and graduate programs through direct and indirect entries. Qualified students will receive financial assistance that will help them to achieve their dreams and goals.

ARTICULATION AGREEMENTS FOR STUDENTS WITH ASSOCIATE DEGREES

The following articulations and Memorandum of Understanding (MOU) are in place:

Cincinnati State Technical and Community College

- Associate of Applied Science (AAS) Degree in Engineering Technology (Environmental Technology) to Bachelor Science (BS) in Water Resources Management at CSU
- Associate of Science (AS) Degree to Bachelor Science (BS) in Environmental Engineering at CSU
- Associate of Applied Science (AAS) Degree in Mechanical Engineering Technology to Bachelor Science (BS) in Industrial Technology (Manufacturing Management Concentration) at CSU

, Cuyahoga Community College

- Associate of Science (AS) Degree to Bachelor Science (BS) in Water Resources Management at CSU
- Associate of Science (AS) Degree to Bachelor Science (BS) in Environmental Engineering

Sinclair Community College

- Associate of Science (AS) Degree (University Parallel) to Bachelor Science in Environmental Engineering at CSU
- Associate of Applied Science (AAS) Degree in Operations Technology (Industrial Technology Option) to Bachelor Science (BS) in Industrial Technology (Manufacturing Management Concentration) at CSU
- Associate of Science (AS) Degree to Bachelor Science (BS) in MFE at CSU

CSU 1890 LAND-GRANT MISSION FUNCTIONS OF THE COLLEGE

Central State University became the 19th member of the 1890 Land Grant Institutions on February 7th, 2014, after the passage of Farm Bill of 2014 in U.S. Congress. This mission calls for teaching, research and extension in agriculture, food and health sciences, water and other natural resources, engineering, and agricultural business areas. Expansion in facilities, faculty resources and equipment for the program in agricultural sciences are in progress. In the new functions of research and extension, students will be engaged and will be able to gain additional practical knowledge in their respective fields.

DEPARTMENT OF AGRICULTURAL AND LIFE SCIENCES

The Department of Agricultural and Life Sciences provides education and mentoring for the Bachelor of Science degree in Biology, Chemistry, Exercise Science (Sports Performance, Clinical, and Wellness) and Sustainable Agriculture, It also offers minors in biology, chemistry, environmental science, exercise science, forensic science, sustainable agriculture, and physics. In cooperation with the College of Education, the department offers the Bachelor of Science in Life Science and Physical Science at the adolescent to young adult level (grades 7 – 12), Education at the middle childhood level (grades 4 – 7), and Agriculture Education at the adolescent to young adult level (grades 4 – 12). The requirements are under the College of Education.

Majors must fulfill the University General Education Requirements (Marauder Lifestyle) and the specific requirements for each degree program. Students with majors in education must fulfill the requirements of the College of Education in addition to the requirements of this department. Credit toward the major for students from an accredited institution may be accepted at the discretion of the department.

BIOLOGY The Biology program prepares students to pursue careers as scientists in a variety of fields such as health, allied health, environmental science, animal science, microbiology, and genetics. Biology offers a curriculum that leads to the Bachelor of Science in Biology as well as a minor in Biology. Biology majors must take a minimum of 46 hours of biology, 20 hours of chemistry, 10 hours of calculus-based physics, and 9 hours of calculus. A minimum requirement of 16 hours of biology courses is needed for a minor in biology. Required courses for all degrees are listed under degree requirements. Students interested in the professions of medicine or veterinarian science may choose to take courses in addition to those required for the Biology major. Interested students should consult their advisor.

CHEMISTRY is the scientific study of matter and its chemical reactions. The Chemistry program offers courses leading to the Bachelor of Science in Chemistry as well as a minor in chemistry and forensic science. Chemistry majors must take a range of 43 to 47 semester hours of chemistry, 10 hours of calculus-based physics, and 9 hours of calculus (see degree requirements). A minimum of 19 to 20 semester hours is required for a minor in chemistry. Students interested in the professions of forensic science, medicine, and pharmacy may wish to take courses in addition to the chemistry major and should consult their academic advisor. Students graduating with a Bachelor of Science degree in Chemistry are equipped to join the workforce in positions related to several fields that require quality control analysis,

and innovation and creation of new materials. Additionally, students are well prepared for programs in various medical and pharmaceutical fields as well as graduate programs in various fields.

EXERCISE SCIENCE

Exercise Science is the scientific study of human movement performed to maintain or improve physical fitness. Students of this program assess, design, and implement exercise and fitness programs for individuals who are healthy as well as those needing support to return to a healthier state. Exercise Science offers opportunities in a wide arena of vocational interests. Example career paths include opportunities in public or private education, professional sports training or performance coaching, clinical rehabilitation, corporate fitness, and exercise physiology. Students graduating with a Bachelor of Science in Exercise Science degree may also pursue further professional and graduate level opportunities through additional coursework or credentialing such as: Exercise Physiology, Physical Therapy, Biomechanics, Physician's Assistant, Occupational Therapy, Respiratory Therapist, Medical School, Sport Psychology, Nutrition-Registered Dietitian, Nursing, and jobs in the public health sector. Students interested in Physical Therapy or Medicine should review the suggested academic requirements for Preprofessional Health under the department description and consult with a pre-health advisor.

SUSTAINABLE AGRICULTURE

Central State University had an agriculture program from its inception up through 1960. The coursework for this major provides a nod to the past and the future with a strong science base and coursework to reflect modern cutting-edge research into conservation practices that maximize profitability while sustaining the environment. The Bachelor of Science degree in Sustainable Agriculture is an interdisciplinary major that overlaps coursework in Agribusiness, Biology, Chemistry, Geography, Physics, Manufacturing Engineering, and Water Resources Management. The department maintains a program of related paid and unpaid undergraduate research experiences that emphasize sustainable agricultural practices in practical applications of classroom theory and enhances their skills for generating new knowledge. Graduates of the Sustainable Agriculture program are in great demand in farming, industry and government

Pre-Medical, Pharmacy, Forensic Sciences, Physical Therapy and Veterinary Science Professionals

Programs in the Department of Agricultural and Life Sciences may prepare students for post-baccalaureate study in medicine, veterinary science, dentistry, nursing, optometry, pharmacy, physical therapy, and forensic science. Students interested in these professions should consult their academic advisor for a list of recommended prerequisite courses required prior to matriculation into these professional post-baccalaureate programs. Partnerships and articulation agreements between Central State University, Northeast Ohio Medical University, Cleveland State University and University of Cincinnati are in place to help students to be admitted to medical, pharmacy and graduate programs. Qualified students may be eligible for financial assistance upon acceptance into these professional and graduate programs.

Many students enter college with the intent to pursue a career in a health care field, such as dentistry, medicine, nursing, optometry, pharmacy, or veterinary medicine. All of these careers are the result of professional graduate programs, not specific undergraduate majors. Since these are popular career paths, admission to professional schools are very competitive. In order to have a good chance of getting into a professional school, a student will need to complete all prerequisite courses in a timely fashion and with good grades. The average student admitted to a medical school has an undergraduate GPA of about 3.5 and a score of 810 in each part of the MCAT exam. In addition, many schools will be looking for evidence of commitment to a health care career through volunteer work in hospitals, nursing homes, or animal shelters. Other programs may place emphasis on extracurricular activities.

Health professional school admission prerequisites are fairly uniform. Most schools specify one year of each of the following topics (The corresponding CSU courses are listed in parentheses): Biology (BIO 1801, BIO 1802); English (ENG

1101, ENG 1102); General Chemistry (CHM 1201, CHM 1202); Organic Chemistry (CHM 2401, CHM 2402); Mathematics (MTH 2501 or MTH 2503); and Physics (PHY 2411, PHY 2412 or PHY 2611, 2612).

Some professional schools also ask for courses in quantitative analysis, biochemistry, genetics, anatomy and physiology and psychology. Since most, or all of these courses would be part of a biology or chemistry major, many students gain admission to medical schools through those two majors; however, some medical schools have a policy favoring other majors in order to get more diversity in their student body. Requirements for dental, optometry, pharmacy, or veterinary schools are similar to those for medical schools. Students are urged to consult the websites of any schools of interest to see what specific requirements the graduate program requests.

Medical schools also require that applicants take the MCAT exam. (Similar exams are used by dental, optometry pharmacy and veterinary schools.) A student who plans to enter medical school in the fall immediately after graduation would normally take the MCAT in April of the junior year. Since the MCAT is based on the prerequisite courses listed above, a student should try to complete as many as possible before that time.

The specific sequence of courses a student should take will depend on the student's choice of major and the results of placement exams. The student should work closely with his or her major advisor on scheduling, but regardless of major, a student who wishes to go to medical school needs to complete the admission prerequisite courses by the end of the junior year. Some of these courses need to be done in sequence, so planning is needed. The sequence below is suggested. In addition to the courses listed, a student would need to take courses to meet the General Education and major requirements.

Freshman year: ENG 1101, ENG 1102; BIO 1801, BIO 1802; CHM 1201, CHM 1202; MTH 2502, MTH 2503 (ACT/SAT scores may indicate additional coursework is required ahead of listed courses)

Sophomore year: CHM 2401, CHM 2402; 147 PHY 2411, PHY 2412 (move to junior year if math is not completed)

Junior year: CHM 4300; PSY 1200, PSY 2220 (recommended General Education courses)

Each of the health care professions has an association of its professional schools. These associations have websites that will also provide useful information.

- American Association of Colleges of Osteopathic Medicine (http://www.aacom.org)
- American Dental Association (https://adea.org/dentalschools/)
- American Council on Pharmaceutical Education (http://www.acpe-accredit.org)
- American Nurses Association (http://nursingworld.org)
- Association of American Medical Colleges (http://www.aamc.org)
- Association of American Veterinary Medical Colleges (http://www.aavmc.org)
- Association of Schools and Colleges of Optometry (https://optometriceducation.org/

BIOLOGY DEGREE REQUIREMENTS

A total of 120 semester hours are required for the B.S. degree in Biology.

GENERAL EDUCATION REQUIREMENTS (37-38 hours)

See University General Education Requirements. Science and mathematics requirements are included in the major requirements.

PROGRAM REQUIREMENTS

Biology offers curriculum that leads to the Bachelor of Science in Biology, and a minor in Biology. Biology majors must take a minimum of 46 hours of biology, 20 hours of chemistry, 10 hours of physics, and 9 hours of mathematics. A minimum requirement of 16 hours of biology courses is needed for a minor in biology. Required courses for all degrees are listed under degree requirements. BIOLOGY PRE-MAJOR – All students entering the biology program start with the designation of "." Students wishing to become biology majors must first successfully complete the following courses: BIO 1801, ENG 1102, MTH 2500, 2501or 2502; CHM1201; and USS1000. Note that all these courses have pre- requisites. BIO 1705 and CHM 1050 are required for all students entering with an ACT score of 23 or less in Science (or its equivalent) BEFORE taking BIO 1801 and CHM 1201, respectively. Mathematics pre-requisites may include MTH 1705. A high placement score in mathematics may allow a student to enter MTH 2500, 2501 or 2502 directly. After pre-major coursework is completed, students can apply for formal acceptance into the program. The application package includes an application form, a statement of interest, future goals, basic information about the student, an unofficial transcript, and a check sheet. The biology faculty will meet to review candidates, and a permanent major advisor will be assigned.

BACHELOR OF SCIENCE IN BIOLOGY

A total of 120 credit hours is required for the B.S. major in Biology GENERAL EDUCATION REQUIREMENTS (36 hours); see University General Education Requirements (Marauder Lifestyle). PROGRAM REQUIREMENTS: All biology majors must complete the following major requirements: BIO 1801, BIO 1802, BIO 2100, BIO 2400, BIO 2650, BIO 2750, BIO 2850, BIO 3500, BIO 4100, BIO 4350 and BIO 4500. Required electives include 9 credit hours, a minimum of which must come from 3000-level and 4000-level courses from the following list: BIO 2000, BIO 2050, BIO 2900, BIO 2350, BIO 3050, BIO3070, BIO 3090, BIO 3150, BIO 3550, BIO 3660, BIO 4300, BIO 4350, BIO 4400, and BIO 4600 or CHM 4300. Equivalent BIO 1705 and CHM 1050 are required for all entering freshmen with an ACT score (or equivalent) in Science less than 23. Required support courses for the major include CHM 1201, CHM 1202, CHM 2401, CHM 2402, CHM 3300; MTH 2502, MTH 2503, PHY 2411, and PHY 2412. Only BIO, CHM, MTH and PHY courses passed with a grade of "C" or above will count towards Biology requirements.

TWO STRIKES POLICY (Effective Fall 2013)

Students who do not pass a biology or support course will have only one attempt to retake and pass the class. Failure to achieve a grade of C or higher in appropriate courses will result in the student being dismissed from the major. Withdraws with record are counted as failures for purposes of this policy. Students wishing to appeal the dismissal must do so within one semester of the issuing of the second grade. The student should consult with his/her advisor for additional procedures.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN BIOLOGY (4-year Plan)

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree. Note that "*" on a course indicates courses which are dependent on pre-requisites or placement scores. Prerequisites for these courses must be met either by taking BIO 1705, CHM 1050 and MTH 1750 and MTH 2501 prior to BIO 1801, CHM 1201 and instead of MTH 2500, respectively, OR by placement by ACT score.

Minimum hours needed to obtain a Bachelor of Science in Biology – 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BIO 1801*	Fundamentals of Biology I	4	BIO 1802	Fundamentals of Biology II	4
ENG 1100 OR 1101	Introduction to Writing for College or	4/5	ENG 1102	Writing & Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	HIS 1XXX	1110/1121/1122	3
MTH 2500*	Pre-calculus	4	ELECTIVE	From List C	3
ELECTIVE	From List B	2	HHP 1XXX	HHP Activity	1
Total		15-16			15
Sophomore			Sophomore		
BIO 2100	Writing for Life Sciences	3	BIO2650 or BIO 2060	Microbiology or Environmental Microbiology	4
CHM 1201*	General Chemistry (List D)	4	ELECTIVE	From List C	3
MTH 2502	Calculus I (STEM Math)	4	CHM 1202	General Chemistry II	4
BIO 2750	Zoology	2	MTH 2503	Calculus II	5
BIO 2850	Plant Biology	2			
Total		15			16
Junior			Junior		
BIO 2400	Molecular Genetics	4	ELECTIVE	From List C	3
CHEM 2401	Organic Chemistry I	4	CHM 2402	Organic Chemistry II	4
BIO XXXX	Biology Elective	3-4	PHY 2412	University Physics II	5
PHY 2411	University Physics I (List D)	5	BIO XXXX		3-4
Total		16-17			16-17
Senior			Senior		
BIO 3500	Ecology	4	BIO 4100	Molecular Cell Biology	4
ELECTIVE	University Electives	3	BIO XXXX	Biology Elective	3-4
CHM 4300	Biochemistry	4	ELECTIVES	University Electives to complete 120hrs.	0-6
BIO XXXX	Biology Elective	3-4			
BIO 4500	Undergraduate Research in Biology	2			
Total		16-17			12-15

CHEMISTRY PROGRAM

GENERAL INFOMRATION

The Chemistry program offers courses leading to the Bachelor of Science in Chemistry as well as a minor in chemistry and forensic sciences. Chemistry majors must take a minimum range of 43 to 47 semester hours in chemistry, 10 hours in calculus-based physics and 9 hours in calculus (see degree requirements).

A total of 120 semester hours are required for the B.S. degree in Chemistry.

GENERAL EDUCATION REQUIREMENTS (37-38 hours)

See University General Education Requirements. Science and mathematics requirements are included in the major requirements.

PROGRAM REQUIREMENTS

The Chemistry program offers courses leading to the Bachelor of Science in Chemistry as well as a minor in chemistry and forensic sciences. Chemistry majors must take a range of 43 to 47 semester hours in chemistry, 10 hours in calculus-based physics and 9 hours in calculus (see degree requirements). CHEMISTRY PRE-MAJOR –Students wishing to become chemistry majors must first successfully complete the following courses: ENG 1100/1101, ENG 1102; MTH 1750 and MTH 2501, or MTH 2500; CHM 1050*, CHM 1201, CHM 1202; and USS 1000. * CHM1050 is required for all students entering with an ACT score of less than 23 Science (or its equivalent). A high placement score in mathematics may preclude MTH 1750 and/or MTH 2501. Note that the pre-requisite for MTH 2502 is MTH 2500 OR MTH 1750 and MTH 2501. After this coursework is completed, students may apply for acceptance into the program. A complete application includes a check sheet, a statement of interest, future goals, basic information about the student, and an unofficial transcript. Upon completion and submission of the package, chemistry faculty members will review candidates. If accepted into the program, a permanent major advisor will be assigned.

BACHELOR OF SCIENCE IN CHEMISTRY — See Marauder Lifestyle for general education requirements. All chemistry majors must take the following major requirements: CHM 1201, CHM 1202, CHM 2200, CHM 2401, CHM 2402, CHM 3050, CHM 3100, CHM 3300, CHM 3501, CHM 3502, CHM 4200, CHM 4791, CHM 4792, and one additional chemistry course at the 3000 or 4000 level; MTH 2502, MTH 2503; PHY 2411 and PHY 2412. Only CHM, MTH and PHY courses passed with a grade of "C" or above will count towards Chemistry requirements.

TWO STRIKES POLICY – (Effective Fall 2013) – Students who do not pass a chemistry or support course will have only one attempt to retake and pass the class. Failure to achieve a grade of C or higher in appropriate courses will result in the student being dismissed from the major. Withdraws with record are counted as failures for purposes of this policy. Students wishing to appeal the dismissal must do so within one semester of the issuing of the second grade. The student should consult with his/her advisor for additional procedures.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN CHEMISTRY

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University Requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Chemistry – 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
CHM 1201	General Chemistry I (List D)	4	CHM 1202	General Chemistry II	4
ENG 1101	Intro to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	HIS XXXX	1110, 1121, 1122	3
MTH 2502	Calculus I	4	MTH 2503	Calculus II	5
ELECTIVE	From List C	3			
Total		17			16
Sophomore			Sophomore		
CHM 2401	Organic Chemistry I	4	CHM 2402	Organic Chemistry II	4
PHY 2411	University Physics I	5	PHY 2412	University Physics II	5
ELECTIVE	From List C	3	ELECTIVE	From List B	3
ELECTIVE	From List B	3	HHP 1XXX	HHP Activity	1
Total		15			13
Junior			Junior		
CHM 2200	Quantitative Analysis	4	CHM 3050	Chemistry Seminar	2
CHM 3100	Inorganic Chemistry	3	CHM 4200	Instrumental Analysis	4
CHM 3300	Intro to Biochemistry	3	ELECTIVE	University Electives	6
ELECTIVE	University Electives	6			
Total		16			12
Senior			Senior		
CHM 3501	Physical Chemistry I	3	CHM 3502	Physical Chemistry II	4
CHM 4791	Undergraduate Research I	2	CHM 4792	Undergraduate Research II	2
CHM XXXX	Chemistry Elective	4	CHM XXXX	Chemistry Elective	4
ELECTIVE	University Elective	6	ELECTIVE	University Electives for a total of 120 credits	6
Total		15			16

EXERCISE SCIENCE DEGREE REQUIREMENTS A total of 120 semester hours are required for the B.S. degree in Exercise Science – Sports Performance.

GENERAL EDUCATION REQUIREMENTS (36 hours); see University General Education Requirements.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN EXERCISE SCIENCE- SPORTS PERFORMANCE

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University Requirements, the General Education Requirements and any Special Requirements for degree.

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BIO 1705	Biological Concepts	4	CHM 1150	Elements of Chemistry w/ Lab	4
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	HIS XXXX	1110, 1121, 1122	3
MTH 1750	College Algebra	3	PSY 1200	General Psychology	3
EXS 1100	Intro to Exercise Science	4	HHP 1000	Health and Wellness	1
Total		17			16
Sophomore			Sophomore		
EXS 2260	Principles of Exercise Leadership	3	EXS 2302	Anatomy and Physiology II	4
EXS 2202	Nutrition for Health and Exercise	3	EXS 2410	Medical Terminology	3
EXS 2301	Anatomy and Physiology I	4	HHP 3340	Physiology of Exercise	3
ELECTIVE	From List B	3	HHP 3348	Family Life and Disease Education	3
ELECTIVE	University Elective	3	ELECTIVE	From List C (not Psychology)	3
Total		16			16
Junior			Junior		
EXS 3200	Prevention & Care of Athletic Injuries	4	EXS 3300	Nutrition for Sports Performance	3
HHP 3326	Motor Development	3	EXS 3100	Ergonomics	3
HHP 3318	Principles of Coaching	2	EXS 3356	Clinical Practicum III	3
HHP 3317	Sports Officiating	2	ELECTIVE	Program Elective	3
HHP 3312	Behavioral Aspects of Physical Activity	3	HHPS 1XXX	HHP Activity	1
EXS 3000	Biomechanics	3	ELECTIVE	University Elective	3-4
Total		17			16-17
Senior			Senior		
PHY 1120	Physical Science	3	ELECTIVE	University Elective	3
EXS 4491	Exercise Science Clinical Experience	3	EXS 4422	Exercise in Special Populations	3
EXS 4421	Exercise Testing & Prescription	3	EXS 4401	Seminar	1
EXS 4419	Principles of Sports Conditioning	3	ELECTIVE	Program Elective	8
HHP 4432	Test & Measurements of Phys Educ	2	EXS 4492	EXS Clinical Experience	
Total		15			12

CURRICULUM FOR BACHELOR OF SCIENCE MAJOR IN EXERCISE SCIENCE- CLINICAL

Thecurriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University Requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Exercise Science - Clinical – 123

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BIO 1801	Fundamentals of Biology I	4	BIO 1802	Fundamentals of Biology II	4
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	HIS XXXX	1110, 1121, 1122	3
MTH 1750	College Algebra	3	PSY 1200	General Psychology	3
EXS 1100	Intro to Exercise Science	4	MTH 2501	Trigonometry	3
Total		17			17
Sophomore			Sophomore		
EXS 2260	Exercise Leadership	3	EXS 2302	Anatomy and Physiology II	4
EXS 2202	Nutrition for Health and Exercise	3	EXS 2410	Medical Terminology	3
EXS 2301	Anatomy and Physiology I	4	CHM 1202	General Chemistry II	4
CHM 1201	General Chemistry I	4	HHP 3348	Family Life and Disease Education	3
ELECTIVE	From List B	3			
Total		17			14
Junior			Junior		
HHP 3312	Sports Psychology	2	EXS 3302	Nutrition in Health and Disease	3
EXS 3000	Biomechanics	3	EXS 3100	Ergonomics	3
PHY 2611	College Physics I	4	EXS 3356	Clinical Practicum III	3
HHP 3326	Motor Development	3	PHYS 2612	College Physics II	4
HHPS 3340	Physiology of Exercise	3	HHP 3340	Physiology of Exercise	3
ELECTIVE	From List A	3			
Total		18			16
Senior			Senior		
EXS 4491	Seminar in EXS	4	EXS 4422	Exercise in Special Populations	3
EXS 4421	Clinical Exercise Testing & Prescription	3	EXS 4401	Seminar: Current Research in EXS	1
EXS 4419	Principles of Sports Conditioning	3	EXS 4492	Exercise Science Clinical Experience	4
HHP 2230	First Aid and Terminology	3	EXS 4420	Introduction to ECG	2
			ELECTIVE	From List C	3
Total		13			13

CURRICULUM FOR BACHELOR OF SCIENCE MAJOR IN EXERCISE SCIENCE- WELLNESS

Thecurriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University Requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Exercise Science - Wellness – 124

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
BIO 1705	Biological Concepts	4	CHM 1150	Elements of Chemistry w/Lab	4
ENG 1101	Introduction to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	HIS XXXX	1110, 1121, 1122	3
MTH 1750	College Algebra	3	PSY 1200	General Psychology	3
EXS 1100	Intro to Exercise Science	4	ELECTIVE	From List B	3
Total		17			17
Sophomore			Sophomore		
EXS 2260	Exercise Leadership	3	EXS 2302	Anatomy and Physiology II	4
EXS 2202	Nutrition for Health and Exercise	3	EXS 2410	Medical Terminology	3
EXS 2301	Anatomy and Physiology I	4	HHP 3340	Physiology of Exercise	3
HHP 2230	First Aid and Terminology	3	HHP 3348	Family Life and Disease Education	3
PHY 1120	Physical Science	3	ELECTIVE	From List D	3
Total		16			16
Junior			Junior		
HHP 3312	Sports Psychology	3	EXS 3302	Nutrition in Health and Disease	3
HHP 3326	Motor Development	3	EXS 3100	Ergonomics	3
EXS 3000	Biomechanics	3	EXS 3356	Clinical Practicum III	3
ELECTIVE	From List C *PSY 1200 Intro to Psychology	3	HHP 1XXX	HHP Activity	1
BUS 1100	Contemporary American Business	3	BUS 2343	Principles of Management	3
Total		15			13
Senior			Senior		
EXS 4421	Clinical Exercise Testing & Prescription	3	EXS 4422	Exercise in Special Populations	3
EXS 4491	Exercise Science Clinical Experience	3	EXS 4401	Seminar	1
EXS 4419	Principles of Sports Conditioning	3	EXS 4492	Exercise Science Clinical Experience	4
BUS 2353	Principles of Marketing	3	MKT 3396	Consumer Behavior	3
			EXS 4425	Workplace Wellness & Health Promotion	3
Total		12			14

CURRICULUM FOR BACHELOR OF SCIENCE MAJOR IN SUSTAINABLE AGRICULTURE

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.
*Note that these courses are for incoming first-time freshmen student with Composite ACT Entrance Scores less than 23 or equivalent for Biology and Chemistry courses; or less than 18 ACT score in Mathematics or less than 18 ACT score in English or equivalent. Consult with academic advisor or Department Chair.

Minimum hours needed to obtain a Bachelor of Science in Sustainable Agriculture– 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Introduction to Writing for College	4	ENG 1102	Wring and Researching the Essay	4
MTH 2500 OR 2501	Pre-Calculus or Trigonometry	3	ELECTIVE	University Elective	2-3
BIO 1801*	Fundamentals of Biology I	4	BIO 1802	Fundamentals of Biology II	4
AGR 1150	Intro to Sustainable Agriculture	3	HIST XXXX	1110/1121/1122	3
USS 1000	Undergraduate Success Seminar	2	AGR 2500	Mechanical Principles in AG	3
			HIS XXX	1110, 1121, or 1122	3
Total		16			16-17
Sophomore			Sophomore		
CHM 1201	General Chemistry I	4	BIO 2650	Microbiology	4
PHY 2611	College Physics I	4	CHM 1202	General Chemistry II	4
AGB 2300	Intro to Agribusiness	3	PHY 2612	College Physics II	4
AGR 2250	Careers in Sustainable Agriculture	1	AGR 1220	Horticulture	4
HHP 1XXX	From List A	1			
ELECTIVE	University Elective	3			
Total		16			16
Junior			Junior		
AGR 2450	Soil Science	4	ELECTIVE	From List B	3
AGR 2150	Intro Animal Science	4	AGR 2350	Community Agriculture	3
ECO 2210	Intro to Microeconomics	3	AGR 3330	Soil & Water Conservation	3
AGR 1250	Prin of Precision Agriculture	4	AGB 3240	Farm Management	3
Total		15			15
Senior			Senior		
AGR 4350	Integrated Pest Management	4	AGR 3XXX	AGR Elective	4
AGR 4500	Internship Sustainable Agriculture	2	AGR 4XXX	AGR Elective	3
ELECTIVE	AGR Elective	3-4	ELECTIVE	University Elective	3
AGR 3250	Grain Crops	4	AGR 3450	Agriculture Extension	3
ELECTIVE	Elective	3			
Total		16-17			13

DEPARTMENT OF ENGINEERING AND TECHNOLOGY

GENERAL INFORMATION

The Department of Engineering and Technology, composed of the Manufacturing Engineering Program (MFE), the Industrial Technology Program (INT), the Environmental Engineering Program (ENE), and the Water Resources Management Program (WRM), carries on the University's historic tradition of providing relevant technical education to under-served populations with diverse backgrounds and educational needs. To uphold this rich heritage, the Department offers four baccalaureate degree programs: the B.S. degree in Manufacturing Engineering, the B.S. degree in Industrial Technology, the B.S. degree in Environmental Engineering, and the B.S. degree in Water Resources Management. The Department draws strong guidance and support from an active Industrial Advisory Committee comprised of engineers and executives from diverse manufacturing companies and technical organizations. This industrial support provides for program enhancement and ensures program relevance in preparing students for technical careers. In addition, the Department maintains a program of related research that engages students in practical applications of classroom theory and enhances their skills for generating new knowledge.

Spacious, well-equipped laboratories with modern machinery, computer hardware and software are available to support the teaching and research activities of the Department. To provide special opportunities for students to develop technical leadership and teaming skills, the Department promotes active student chapters of the Society of Manufacturing Engineers (SME) and the National Society of Black Engineers (NSBE). Both engineering and technology majors must fulfill the University General Education requirements. During the Spring semester of the senior year, Manufacturing Engineering majors are also encouraged to take the Fundamentals of Engineering Examination, which is the initial step in attaining professional engineering licensure. Each engineering or technology major receives academic advising by a member of the Department of Engineering and Technology faculty. Nevertheless, students are responsible for knowing and complying with all published schedules and graduation requirements.

MANUFACTURING ENGINEERING PROGRAM

General Information Graduates of the Manufacturing Engineering program are in great demand from prestigious firms and government agencies.

TRENDS IN MANUFACTURING

Manufacturing is one of the major wealth producing sectors of the world economic structure with a direct and powerful impact on the quality of life of everyone. The field of manufacturing has undergone dramatic changes during the past decade. Diverse forces driving these changes include the following factors: rapid technological advances in areas such as computers, lasers, machine vision, robotics and automation; emerging new materials including polymers, composites and ceramics; an increasing global economy with intensified international trade competition; changing national defense and security priorities; changing labor management relationships; dwindling natural resources; increasing energy costs; bio-socio-educational factors impacting educational access and delivery and heightened environmental concerns. These factors continue to produce new demands and exciting opportunities for manufacturing engineers. Graduates of the program have found diverse employment in manufacturing fields such as automotive, aerospace, electronics, defense, food processing, and consumer product industries. Others have earned related graduate degrees at some of the nation’s finest graduate engineering schools prior to assuming industry positions.

MFE PROGRAM EDUCATIONAL OBJECTIVES (PEO)

The Manufacturing Engineering program at Central State University is dedicated to preparing students for manufacturing engineering careers in diverse manufacturing enterprises. The MFE Program expects the graduates within few years of graduation to attain the following objectives:

1. Have productive careers.
2. Embrace leadership opportunities, promote diversity, and communicate effectively.
3. Pursue professional development and continuing education.
4. Adhere to the Engineer's code of conduct and ethics.
5. Positively contribute to the university, local communities, and global societies.

The Bachelor of Science degree program in Manufacturing Engineering has been designed to address these objectives. The curriculum follows guidelines established by the Society of Manufacturing Engineers (SME), an international organization headquartered in Southfield, Michigan with over 30,000 members in seventy-two (72) countries. SME seeks to ensure that Manufacturing Engineering programs produce engineers prepared to address industry demands for increasingly sophisticated manufacturing technology, and ready to play an important role in planning, building, and optimizing the "factories of the future." Emphasis is, therefore, given to computer-aided design and manufacturing (CAD/CAM), layered manufacturing or 3-D printing, microprocessor control, manufacturing planning and control, quality and reliability assurance, metrology and the processing and utilization of engineering materials. The program provides opportunities for hands-on experience in the application of the knowledge embodied in these disciplines. The BS degree program in Manufacturing Engineering is one of only a few programs in the nation which are dedicated to undergraduate manufacturing engineering education, and which are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET).

The overarching goal of the program is to produce graduates who are well prepared to:

- Contribute to the engineering planning and management of a relatively large, modern manufacturing operation.
- Introduce modern manufacturing methods and design technologies into a small manufacturing operation or assist in the start-up of a new manufacturing enterprise.
- Maintain a process of life-long learning to retain technical competence, including earning graduate degrees in engineering or related business management or other professional studies and obtaining relevant professional certification.

The overall Manufacturing Engineering curriculum consists of strong components of mathematics, basic sciences, engineering sciences, humanities, and social sciences, together with the engineering major requirements which can be grouped into the following topic areas:

Materials and Manufacturing Processes — the structure and property relationships of materials and its change with materials processing.

Process, Assembly, and Product Engineering — the design of products and the equipment, tooling and environment necessary for their manufacture supported by rapid prototyping and 3-D layered manufacturing.

Manufacturing Competitiveness — the creation of competitive advantage through manufacturing planning, strategy, and control. Topics such as productivity, quality, reliability, economic and cost analysis, human resources, product safety and liability, social concerns, international issues, environmental impact, and product life cycle are included in this area.

Manufacturing Systems Design — the analysis, synthesis and control of manufacturing operations emphasizing modern technologies and tooling and statistical and calculus-based methods.

Simulation and Information Technology — Simulation, modeling, control, architecture, and information systems supported by experimental design for factory optimality control are included in this area.

Laboratory Experience - Measuring manufacturing process variables in a manufacturing laboratory and making technical inferences about the process. Throughout the curriculum major emphasis is given to the engineering design function. The Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET) has published the following description for engineering design:

Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision-making process (often iterative), in which the basic sciences and mathematics and engineering sciences are applied to convert resources optimally to meet a stated objective. Among the fundamental elements of the design process are the establishment of objectives and criteria, synthesis, analysis, construction, testing and evaluation. The engineering design component of a curriculum must include most of the following features: development of student creativity, use of open-ended problems, development and use of modern design theory and methodology, formulation of design problem statements and specifications, consideration of alternative solutions, feasibility considerations, production processes, concurrent engineering design, and detailed system descriptions. Further, it is essential to include a variety of realistic constraints, such as economic factors, safety, reliability, aesthetics, ethics and social impact."

In the senior year, the design experience culminated with a sequenced two-semester "capstone" design project. Students work on individual or team design projects under close faculty supervision. A broad range of resources including machine tools, materials testing and processing equipment, electronic and measuring instrumentation, computers and control devices are available to prepare students for the real-world challenges of the engineering profession. Oral and written communication skills are emphasized in the senior design project.

MFE STUDENT OUTCOME (SO) The broad educational experience outlined above is designed to integrate the knowledge, skills, attitudes, and values acquired in a diverse set of courses to produce graduates with the following specific student outcomes:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
- an ability to communicate effectively with a range of audiences
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

DEGREE REQUIREMENTS A total of 133 semester hours are required for the BS degree in manufacturing engineering:
GENERAL EDUCATION REQUIREMENTS (Min 39-40 hours): Twenty-seven of a total fifty (50) credits apply also to the manufacturing engineering (MFE) program requirements; see University General Education Requirements.

MANUFACTURING ENGINEERING PROGRAM REQUIREMENTS:

The majority of the MFE courses emphasize design, the process of devising a system, component, or process to meet some desired need. The design course work provides experience in open-ended problem solving by combining decision

making and creative thoughts with basic and engineering sciences. The design experience is incorporated across a variety of subject areas and increases in amount and complexity. In addition, the MFE Program is addressing the desired outcomes defined by the Society for Manufacturing Engineers (SME). It had put in place the mechanisms to ensure that by the time of graduation, the graduating seniors do possess:

- Proficiency in materials and manufacturing processes: understanding the behavior and properties of materials as they are altered and influenced by processing in manufacturing.
- Proficiency in process, assembly, and product engineering: understanding the design of products and the equipment, tooling and environment necessary for their manufacture.
- Proficiency in manufacturing competitiveness: understanding the creation of competitive advantage through manufacturing planning, strategy, and control.
- Proficiency in manufacturing systems design: understanding the analysis, synthesis and control of manufacturing operations using statistical and calculus-based methods, simulation, and information technology.
- Proficiency in laboratory practices: graduates must be able to measure manufacturing process variables in a manufacturing laboratory and make technical inferences about the process.

BACHELOR OF SCIENCE IN MANUFACTURING ENGINEERING — Marauder Lifestyle Courses: USS 1000 and 1 semester credit from Physical Activity (List A); Marauder Foundation Core Courses: ENG 1100 or ENG 1101, MTH 2502, and HIS 1110, HIS 1121 or HIS 1122; Marauder Foundation Bridge Courses: ENG 1102, 3 hours from Humanities (List B); 6 hours in two disciplines from Social and Behavioral Sciences (List C); CHM 1201, CHM 1202, PHY 2411, PHY 2412, MTH 2503, and MTH 3110.

All manufacturing engineering majors must take the following major requirements: INT 1210, MFE 1110, MFE 1210, MFE 2310, MFE 2320, MFE 2410, MFE 2420, MFE 2430, MFE 2440, MFE 3510, MFE 3520, MFE 3530, MFE 3540, MFE 3550, MFE 3610, MFE 3620, MFE 3630, MFE 3640, MFE 4710, MFE 4720, MFE 4730, MFE 4795, MFE 4810, MFE 4820, MFE 4895. A grade of "C" or better in these courses is required to earn a major degree in Manufacturing Engineering.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN MANUFACTURING ENGINEERING

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Manufacturing Engineering – 133

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
MTH 2502	Calculus I	4	MTH 2503	Calculus II	5
CHM 1201	Chemistry I	4	CHM 1202	Chemistry II	4
MFE 1110	Principles of Manufacturing	3	MFE 1210	Engineering Analysis I	3
INT 1210	Engineering Computer Graphics	3	ENG 1101	Intro to Writing for College	4
USS 1000	Undergraduate Success Seminar	2	HIS XXXX	1110, 1121, 1122	3
Total		16			19
Sophomore			Sophomore		
PHY 2411	University Physics I	5	PHY 2412	University Physics II	5
PHY 2411L	University Physics Lab I	0	PHY 2412L	University Physics Lab II	0
MTH 3110	Differential Equations	4	MFE 2410	Engineering Analysis II	4
MFE 2310	Statics	3	MFE 2420	Dynamics	3
MFE 2320	Computer-Aided Design	3	MFE 2430	Design of Experiments	3
ENG 1102	Writing & Researching the Essay	4	MFE 2440	Computer-Aided Manufacturing	3
Total		19			18
Junior			Junior		
MFE 3510	Circuit Analysis	4	MFE 3610	Automatic Control Systems	3
MFE 3520	Microprocessors	3	MFE 3620	Programmable Logic Controllers	3
MFE 3530	Strength of Materials	3	MFE 3630	Manufacturing Processes	4
MFE 3540	Material Science & Processes	4	MFE 3640	Machine & Tool Design	4
MFE 3550	Thermodynamics & Heat Transfer	3	HHP 1XXX	HHP Activity	1
Total		17			15
Senior			Senior		
MFE 4710	Measurements & Instrumentation	3	MFE 4810	Design for Assembly & Syst Int	3
MFE 4720	Manufacturing Quality & Economy	4	MFE 4820	Manufacturing Planning Control	4
MFE 4730	Hydraulic & Pneumatics	3	MFE 4985	Senior Design Project II	2
MFE 4795	Senior Design Project I	1	ELECTIVE	From List C	3
ELECTIVE	From List B	3	ELECTIVE	From List C	3
Total		14			15

INDUSTRIAL TECHNOLOGY PROGRAM

GENERAL INFORMATION

Industrial technology is a field of study designed to prepare technical and/or management-oriented professionals for employment in business, industry, education, and government. Industrial technology is primarily involved with the management, operation, and maintenance of complex technological systems, while engineering and engineering technology are primarily involved with the design and installation of these systems.

TRENDS IN TECHNOLOGY

The pervasive use of technology on a global scale has created a demand for management-oriented technical professionals with an understanding of fundamental technical principles and the practical skills required to apply those principles in the laboratory, manufacturing shop floor, and business office. These individuals must also understand the basic economic and business principles, which guide business and technology. The BS degree program in Industrial Technology has been designed to fulfill these requirements. Graduates of the program find diverse employment opportunities as production supervisors, information technology technicians, or as industrial sales, marketing, or management profession.

INDUSTRIAL TECHNOLOGY CURRICULUM OBJECTIVES

The Bachelor of Science degree program in Industrial Technology addresses the need for technical professionals with specialized technical training. To achieve in-depth training in a selected discipline, students can choose from one of two concentrations: Computer Technology and Manufacturing Management. The selection of the concentration is normally based upon individual student interests, skills and career goals with input and guidance by a faculty advisor. The technology core of the curriculum builds upon a foundation of trigonometry and includes components of metals technology and machining principles, occupational safety and health, computer numerical-controlled (CNC) machining, computer aided-design and computer aided manufacturing (CAD/CAM); electrical circuits, digital electronics, microprocessors, programmable logic controllers (PLC), and statistical analysis. Throughout the program, a heavy emphasis is placed upon hands-on laboratory experience and practical applications of the theory gained in the classroom lecture sessions.

DEGREE REQUIREMENTS

A total of 120 semester hours are required for the BS degree in Industrial Technology with a concentration in Manufacturing Management or Computer Technology.

COOPERATIVE EDUCATION EXPERIENCES

A student majoring in Industrial Technology may participate in the Cooperative Education program. All Industrial Technology majors are encouraged to take part in the Cooperative Education Program, which offers students an opportunity to integrate classroom theory with planned periods of practical “real world” work assignments. Each student may spend one to two semesters of his/her academic program working in an approved position. A total of 24 credit hours can be applied towards graduation and is included in the student’s transcript under “Earned Hours.”

GENERAL EDUCATION REQUIREMENTS (Min 39-40 hours)

Nine (9) of the total forty-one (41) credits apply also to the industrial technology (INT) program requirements; see University General Education Requirements.

BACHELOR OF SCIENCE IN INDUSTRIAL TECHNOLOGY - Computer Technology Option — Marauder Lifestyle Courses: USS 1000 and 1 semester credit from Physical Activity (List A); Marauder Foundation Core Courses: ENG 1100 or ENG 1101, MTH 1750, and HIS 1110, HIS 1121 or HIS 1122; Marauder Foundation Bridge Courses: ENG 1102, 3 hours from Humanities (List B); 6 hours in two disciplines from Social and Behavioral Sciences (List C); 6 hours from Natural and Physical Sciences (List D); MTH 2001, MTH 2501, and ECO 2210.

All Industrial Technology – Computer Technology majors must take the following major requirements: ACC 2210, ACC 2220, BUS 1100, BUS 2200, BUS 2343, CPS 1191, CPS 2215, CPS 2236, CPS 3316, CPS 3320, CPS 3325, INT 1110, INT 1210, INT 2311, INT 2312, INT 2410, INT 2420, INT 2430, INT 3520, INT 3540, INT 3630, INT 4720, INT 4795, INT 4895, MGT 4441, MFE 1110, MKT 3456, MTH 2001, MTH 2501. A grade of "C" or better in these courses is required to earn a major degree in Industrial Technology.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE IN INDUSTRIAL TECHNOLOGY OPTION IN

COMPUTER TECHNOLOGY The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Industry Technology – Computer Technology Option – 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
MTH 1750	College Algebra	3	ENG 1102	Writing & Researching the Essay	4
ENG 1101	Intro to Writing for College	4	INT 1210	Engineering Computer Graphics	3
USS 1000	Undergraduate Success Seminar	2	MTH 2501	Trigonometry	3
INT 1110	Engineering Print Reading	3	BUS 1100	Contemporary American Business	3
MFE 1110	Principles of Manufacturing	3	HHP 1XXX	HHP Activity	1
Total		15			
Sophomore			Sophomore		
CPS 1191	Computer Science I	4	INT 2312	Circuit Analysis II	3
CPS 2215	Internet and Web Essentials	3	INT 2410	Industrial Safety & Health	3
INT 2311	Circuit Analysis I	3	INT 2420	Ind. Instrument & Process Ctrl	3
MTH 2001	Probability and Statistics	3	INT 2430	Electronic Devices & Circuits	4
BUS 2200	Legal Environment of Business	3	ELECTIVE	From List D	2
Total		16			15
Junior			Junior		
ACC 2210	Financial Accounting	3	ACC 2220	Managerial Accounting	3
CPS 3381	Prin. Of Operating Systems	3	CPS 3316	Computer Networks	3
CPS 3320	Database Systems	3	CPS 3325	Java Programming	3
INT 3520	Digital Systems	4	HIS XXXX	1110, 1121, 1122	3
INT 3540	Programmable Logic Controllers	3	INT 3630	Microprocessors	4
Total		16			16
Senior			Senior		
BUS 2343	Principles of Management	3	INT 4895	Senior Design Capstone II	2
INT 4720	Communication Systems	3	MGT 4441	Labor Management	3
INT 4795	Senior Design Capstone I	2	MKT 3395	Sales Management	3
ELECTIVE	From List D	3	ELECTIVE	From List B	3
ELECTIVE	From List C	3	ECO 2210	Principles of Microeconomics	3
Total		14			14

BACHELOR OF SCIENCE IN INDUSTRIAL TECHNOLOGY – Manufacturing Management Option — Marauder Lifestyle Courses: USS 1000 and 1 semester credit from Physical Activity (List A); Marauder Foundation Core Courses: ENG 1100 or ENG 1101, MTH 1750, and HIS 1110, HIS 1121 or HIS 1122; Marauder Foundation Bridge Courses: ENG 1102, 3 hours from Humanities (List B); 6 hours in two disciplines from Social and Behavioral Sciences (List C); 6 hours from Natural and Physical Sciences (List D); MTH 2001, MTH 2501, and ECO 2210;

All Industrial Technology – Manufacturing Management majors must take the following major requirements: ACC 2210, ACC 2220, BUS 1100, BUS 2200, BUS 2343, BUS 2353, BUS 3331, INT 1110, INT 1210, INT 2311, INT 2312, INT 2320, INT 2410, INT 2420, INT 2460, INT 3510, INT 3530, INT 3540, INT 3550, INT 3610, INT 3620, INT 4710, INT 4730, INT 4795, INT 4895, MGT 4441, MFE 1110, and MKT 3456. A grade of "C" or better in these courses is required to earn a major degree in Industrial Technology.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE IN INDUSTRIAL TECHNOLOGY OPTION IN MANUFACTURING MANAGEMENT

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree. The minimum hours needed to obtain a Bachelor of Science in Industry Technology – Manufacturing Management Option – 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
MTH 1750	College Algebra	3	ENG 1102	Writing & Researching the Essay	4
ENG 1101	Intro to Writing for College	4	INT 1210	Engineering Computer Graphics	3
USS 1000	Undergraduate Success Seminar	2	MTH 2501	Trigonometry	3
INT 1110	Engineering Print Reading	3	HIS 1XXX	1110, 1121, 1122	3
MFE 1110	Principles of Manufacturing	3	ELECTIVE	From List B	3
Total		15			16
Sophomore			Sophomore		
INT 2311	Circuit Analysis I	3	ACC 2210	Financial Accounting	3
INT 2320	Advanced 3-D Modeling	3	BUS 2200	Legal Environment of Business	3
MTH 2001	Probability and Statistics	3	INT 2312	Circuit Analysis II	3
ELECTIVE	From List B	3	INT 2410	Industrial Safety & Health	3
BUS 1100	Contemporary American Business	3	INT 2420	Ind. Instrument & Process Ctrl	3
			INT 2460	Applied Statics	3
Total		15			18
Junior			Junior		
BUS 2353	Principles of Marketing	3	ACC 2220	Managerial Accounting	3
INT 3510	Materials & Machine Processes	3	BUS 2343	Principles of Management	3
INT 3530	Quality Control (SPS/DOE)	3	HHP 1XXX	HHP Activity	1
INT 3540	Programmable Logic Controllers	3	INT 3610	Plastic Technology	3
INT 3550	Applied Strength of Materials	3	INT 3620	Computer Numerical Control	3
Total		15			13
Senior			Senior		
INT 4710	Manufacturing Processes	3	BUS 3331	Principles of Finance	3
INT 4730	CAD/CAM/CAE	3	INT 4895	Senior Design Capstone II	2
INT 4795	Senior Design Capstone I	3	MKT 3395	Sales Management	3
MGT 4441	Labor Management	1	ELECTIVE	From List C	3
ELECTIVE	From List D	3-4	ECO 2210	Prin of Microeconomics	3
Total		14-15			14

The Department of Water Resources Management offers programs in Environmental Engineering (ENE) and Water Resources Management (WRM). In addition to its primary role of offering baccalaureate programs, the department also offers continuing education opportunities for practicing professionals in the field of water resources management and environmental engineering. The department engages in research and in outreach activities to attract high school students to pursue higher education in these fields.

The programs in the department lead to Bachelor of Science degrees in Environmental Engineering (B.S. in Environmental Engineering) and Water Resources Management (B.S. in Water Resources Management). They are structured to provide students with the knowledge of diverse aspects of these interdisciplinary fields. An internship is a requirement in environmental engineering and water resources management.

GENERAL EDUCATION REQUIREMENTS FOR PROGRAMS IN THE DEPARTMENT The University General Education Requirements apply to the majors in the Department (please refer to the General Education Requirements in the University Course catalog). Students in WRM and ENE automatically fulfill the natural science requirements under general education by taking their major requirements.

ENVIRONMENTAL ENGINEERING (ENE) PROGRAM

The B.S. degree program in Environmental Engineering is dedicated to undergraduate environmental engineering education and is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET), http://www.abet.org.

The overarching mission of the program is to prepare engineers who specialize in the field of environmental systems at the baccalaureate level, and who understand how to apply engineering principles to solve environmental problems and harness energy while maintaining the integrity of the ecosystem. ENE Program identified five specific program educational objectives (PEOs) to address the local, state, and national opportunities and needs. The ENE program expects the graduates within a few years of graduation to attain the following:

1. Be employed as practicing engineers in environmental engineering or related fields (civil, chemical, ecological, or agriculture) and satisfy and exceed employers' expectations;
2. Develop professionally through the attainment of licensure, or through enrolling in or completing advanced studies in engineering or engineering management;
3. Attain progressive management or leadership positions through professionalism and adherence to engineering code, ethics, and responsibilities;
4. Contribute to the sustainable development of civil, process, and industrial infrastructures through natural resource conservation, environmental preservation and protection, and economic and environmental stewardship;
5. Make a positive impact on the environment, public health, and wellness of global society.

ENVIRONMENTAL ENGINEERING CURRICULUM

The curriculum relies on a strong foundation in sciences and mathematics by requiring students to take courses in rigorous college physics (calculus-based), chemistry and mathematics to advanced levels of differential equations and linear algebra. The program also promotes holistic development of students through courses in humanities, and in social and behavioral sciences as required in the general education curriculum.

Students take general engineering courses such as Engineering Computer Graphics, Statics, Dynamics, Strength of Materials and other courses from the manufacturing engineering program (MFE). With this set of basic science and engineering courses, the program then provides background in Applied Hydraulics, Wastewater Treatment Systems, Municipal and Hazardous Waste Management, Air Quality Engineering and other engineering-based courses. There is an

internship requirement and students engage in a capstone project during the final year. The Mc Lin Center, which houses the WRM Department, has excellent laboratory equipment in the areas of hydraulics, hydrology, water quality, and soils that is essential for the study of environmental engineering.

The department has faculty with expertise in air quality engineering, hydraulics, hydrology, solid waste management, water quality, water policy and regulations, economics, geography, and geology. The uniqueness of the Environmental Engineering (ENE) program at CSU is the availability of interdisciplinary courses within the Water Resources Management (WRM). These courses cover critical issues in water, such as policy, socio-economic impact, environmental regulations, and GIS. The program directly serves the university's land-grant mission by preparing students for careers in civil engineering, environmental engineering, and hydrology in Agriculture, both in the public and private sectors. The Environmental Engineering majors can pursue minors in nuclear engineering or approved minors in other programs.

Student Outcomes for ENE Curriculum

To achieve the program's educational objectives, the environmental engineering program at CSU has adopted the following seven ABET student outcomes:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies

Core Competencies for ENE Graduates

The environmental engineering curriculum provides students with the following competencies upon successful completion of the program:

1. Application of mathematics, physics, chemistry, hydraulics, and engineering for finding solutions for environmental problems.
2. Problem-solving skills by using mathematical, logical, analytical and algorithmic constructs.
3. Effective communication with peers as well as the general public through reading, speaking and writing skills.
4. Capability to use technology tools in planning, design, operation, and management of environmental engineering systems and in the assessment of spatially distributed problems using geospatial tools such as GIS and remote sensing.
5. Ability to use appropriate laboratory and field instrumentation needed in environmental engineering work.
6. Understanding and appreciation of the need for accuracy in professional judgment, accountability, engineering ethics, and social responsibility.
7. The necessity to continuously update skills in the environmental engineering profession. The coursework, laboratory experiences, fieldwork, summer internship, and a capstone design project are used to teach these competencies to hydraulic and environmental engineering students.

Curriculum details are provided below as part of the degree requirements.

WATER RESOURCES MANAGEMENT (WRM) PROGRAM

The Bachelor of Science in Water Resources Management program was one of the first of its kind in the nation. It educates students on the interrelationships of the technical, social, political, environmental, and economic aspects of the field. The program aims to provide students with the educational skills and background necessary for positions in water resources management in private industry, government, and nongovernmental organizations. The program serves the university's land-grant mission by preparing students for careers in water-related fields such as soil and water conservation and irrigation with the U.S. Department of Agriculture. Water Resources Management is intertwined with the environmental field, and the curriculum offers courses that enable students to gain a background in this field as well.

As the population expands and pressure on development increases, the need for water resources management professionals is felt at the state, national and international levels. The program responds to the critical need for water resources professionals who have an understanding of all phases of water resources management within the agriculture and municipal sectors. These professionals help identify the most effective solutions to water resources management problems involving technical and non-technical aspects. The curriculum emphasizes environmental subjects such as soil and water conservation, water chemistry, streams and lakes, and urban water problems. Many program graduates have progressed further by pursuing graduate degrees in specialized fields such as public works management, business management, and water resources/environmental sciences. The curriculum has been enhanced to include water resources management within the industry, particularly in addressing sustainability and climate change.

MINORS

Two options are available in the Department of Engineering and Technology for those students interested in pursuing a minor in related fields.

Minor in Environmental Science

In collaboration with the Department of Agricultural and Life Sciences, the Department of Water Resources Management offers an interdisciplinary minor in Environmental Science. This minor will be particularly helpful to students majoring in Biology, Chemistry, Sustainable Agriculture, Water Resources Management, or Environmental Engineering seeking a career in environmental fields.

Requirements for this minor include a total of 26 credit hours with 17 credit hours of core courses BIO 1500, 3500 (7 Credit hours); CHM 2200 (3 credit hours) WRM 2200, and 3330 (7 credit hours) and 9 credit hours from elective courses BIO 2000, BIO 2050, 2650, 4200, 4300; CHM 2401, 2402, 4200, 4300; GEL 2205; MTH 2001; WRM 3306, 3308, 3310, 3370, and 4470 Students are expected to familiarize themselves with the prerequisites required for each course. A grade of "C" or better is required.

Minor in Water Resources Management

A minor in Water Resources Management is designed for students from other areas who desire knowledge in the field as it pertains to their major.

Requirements for this minor include a total of 20 credit hours with 14 credit hours of core courses WRM 2200, 3330, 3335, 4402, and a minimum of 6 credit hours of elective courses from other WRM courses. Students are expected to familiarize themselves with the prerequisites required for each course. A grade of "C" or better is required.

B.S. IN ENVIRONMENTAL ENGINEERING — ENG 1100 or ENG 1101, ENG 1102 (8|9 credit hours); USS 1000 (2 credit hours); 12 credit hours from Social and Behavioral Sciences and Humanities Electives with two courses per each, including HIS 1110| HIS 1121| HIS 1122| PSY 1200| SOC 1105 and WRM 3370.

All students must take the following major requirements: ENE 2200, 3305, 3309, 3315, 3320, 3325, 4405, 4415, 4425, 4430, 4440, 4496, and 4498 (total of 34 credit hours); WRM 3308 (3 credit hours), Internship ENE 4596 (3 credit hours); and coursework from related areas with the following distribution: INT 1210 (3 credit hours), INT 3650 (3 credit hours), MFE 1210, 2310, 2420, 3530, 3550 (15 credit hours); CHM 1201, 1202 (8 credit hours); GEL 1101 (4 credit hours); PHY 2411 and 2412 (10 credit hours); MTH 2001, 2502, 2503, 3002, 3110 (20 credit hours) and BIO 2650 (4 Credit Hours). Students must earn a grade of "C" or better in their ENE courses.

CURRICULUM FOR BACHELOR OF SCIENCE MAJOR IN ENVIRONMENTAL ENGINEERING

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Environmental Engineering – 129

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
CHM 1201	General Chemistry I	4	CHM 1202	General Chemistry II	4
ENG 1101	Intro to Writing for College	4	ENG 1102	Writing and Research the Essay	4
USS 1000	Undergraduate Success Seminar	2	MFE 1210	Engineering Analysis I	3
INT 1210	Engineering Computer Graphics	3	MTH 2503	Calculus II	5
MTH 2502	Calculus I	4			
Total		17			16
Sophomore			Sophomore		
ENE 2200	Intro to Environ Engineering	3	INT 3650	Surveying	3
SCV	HIS 1110, 1121, 1122, PSY 1200, SOC 1105	3	MTH 2001	Probability & Statistics I	3
MFE 2310	Statics	3	MFE 2420	Dynamics	3
MTH 3110	Differential Equations	4	GEL 1101	Physical Geology	4
PHY 2411	University Physics I w/Lab	5	PHY 2412	University Physics II w/Lab	5
Total		18			18
Junior			Junior		
ENE 3305	Fluid Mechanics and Hydraulics	3	ENE 3315	Air Quality Engineering	3
ENE 3309	Water Chemistry	3	ENE 3320	Engineering Hydrology	3
MFE 3530	Strength of Materials	3	ENE 3325	Groundwater Hydraulics	3
MFE 3550	Thermodynamics & Heat Transfer	3	MTH 3002	Multivariate Calculus	4
WRM 3370	Introduction to GIS	3	BIO 2650	Microbiology	4
Total		15			17
Senior			Senior		
ENE 4415	Water Supply	3	ENE 4405	Applied Hydraulics	3
ENE 4440	Environmental Prof Seminar	1	ENE 4430	Wastewater Treatment Systems	3
ENE 4596	Internship ENE	3	ENE 4498	Senior Capstone Design Project II	2
ENE 4496	Senior Capstone Design Project I	1	WRM 3308	Water and Environmental Law	3
ELECTIVE	From List B or C	3	ELECTIVE	From List B	3
ENE 4425	Solid and Hazard Waste Mgmt.	3			
Total		14			14

B.S. IN WATER RESOURCES MANAGEMENT — ENG 1100 or ENG 1101, ENG 1102; MTH 1750 or STEM MTH; USS 1000; HHP 1101-1121; 12 credit hours from Social and Behavioral Sciences and Humanities Electives with two courses per each including HIS 1110| HIS 1121| HIS 1122| PSY 1200| SOC 1105.

All students must take the following major requirements: WRM 2200, WRM 3302, WRM 3308, WRM 3310, WRM 3330, WRM 3335, WRM 3340, WRM 3370, WRM 4402, WRM 4470, WRM 4495 (total of 33 credit hours), ENE 3309, WRM 4596 (Internship - 3 credit hours); electives from WRM|ENE|AGR|BIO (a total of 20 credit hours with a minimum of 10 credit hours from WRM electives); and coursework from related areas: BIO 1500, BIO 2050 (7 credit hours); CHM 1201, CHM 1202 (8 credit hours); GEL 1110, GEL 2205 (6 credit hours); MTH 2001, MTH 2500|2501 (7|6 credit hours); PHY 2611, PHY 2612 (8 credit hours). Students must earn a grade of "C" or better in their WRM courses.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN WATER RESOURCES MANAGEMENT The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements and any Special Requirements for the above degree.

Minimum hours needed to obtain a Bachelor of Science in Water Resources Management – 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Intro to Writing for College	4	BIO 1500	Environmental Sciences w/Lab	4
USS 1000	Undergraduate Success Seminar	2	ENG 1102	Writing and Research the Essay	4
SCV	HIS 1110, 1121, 1122, PSY 1200, SOC 1105	3	MTH 2001	Probability & Statistics I	3
MTH 1750	College Algebra	3	MTH 2501	Trigonometry	3
WRM 2200	Introduction to WRM	3	ELECTIVE	From List B or C	3
Total		15			17
Sophomore			Sophomore		
CHM 1201	General Chemistry I	4	ELECTIVE	From List C	3
BIO 2050	Biology of the Environment w/Lab	3	CHM 1202	General Chemistry II	4
HHP 1XXX	HHP Activity	1	PHY 2612	College Physics II	4
PHY 2611	College Physics I	4	WRM 3302	Water Resources Policy	3
ELECTIVE	From List B	3	WRM 3308	Water and Environmental Law	3
Total		15			17
Junior			Junior		
ENE 3309	Water Chemistry	3	GEL 2205	Environmental Geology	3
GEL 1110	Oceanography	3	WRM 3310	Streams and Lakes	3
WRM XXXX	WRM/ENE/AGR/BIO Elective	3	WRM 3335	Irrigation and Drainage	3
WRM XXXX	WRM/ENE Elective	1	WRM 4596	Internship (Summer)	3
WRM 3370	Introduction to GIS	3	WRM 3330	Soil and Water Conservation	4
WRM XXXX	WRM/ENE/AGR/BIO Elective	2			
Total		15			16
Senior			Senior		
WRM XXXX	WRM/ENE Elective	1	WRM 3340	Hydrometry	2
WRM XXXX	WRM/ENE/AGR/BIO Elective	3	WRM 4470	Applied Remote Sensing	3
WRM XXXX	WRM/ENE/AGR/BIO Elective	4	WRM 4495	Senior Capstone Project	2
WRM 4402	Urban Water Problems	4	WRM XXXX	WRM/ENE/AGR/BIO Elective	3
			WRM XXXX	WRM/ENE/AGR/BIO Elective	3
Total		12			13

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

The Department of Mathematics and Computer Science offers majors and minors in the disciplines of Computer Science and Mathematics. The department offers a certificate program on cybersecurity. In cooperation with the College of Education, the department offers Mathematics at the Adolescent to Young Adult level and Mathematics at the Middle Childhood level.

Majors must fulfill the University General Education Requirements, and the specific requirements for each degree program. Students with majors in education must fulfill the requirements in the department (requirements vary from discipline to discipline).

Credits for students from an accredited institution may be accepted at the discretion of the department.

The curriculum in mathematics and computer sciences offers courses leading to the Bachelor of Science in Mathematics, and Bachelor of Science in Computer Sciences. A minimum of 49 semester hours in mathematics and a minimum of 8 semester hours in computer science are required for the B.S. degree in mathematics (See DEGREE REQUIREMENTS).

Computer Science majors must take at least 45 semester hours of computer science, 18 semester hours of mathematics, and 4 semester hours of Industrial and Engineering Technology.

The cybersecurity certificate program prepares students for jobs in cyber-related occupations. The students in the program are required to complete 30 credit hours: CPS 1000, CPS 1191, CPS 1192, CPS 2215, CPS 2300, CPS 3316, CPS 3300, CPS 3320, CPS 3550 and CRJ 2210.

The Department of Mathematics and Computer Science offers a minor in Computational Science that will better prepare students for graduate programs and for careers using simulation and modeling software tools. The minor is offered through a statewide consortium of universities in Ohio which is managed by the Ohio Supercomputer Center. The minor will require students to take at least two courses in Computational Science in other departments in the College of Engineering Science Technology and Agriculture. Finally, the minor requires students to participate in a Computational Science summer internship program.

MINORS

Minor requirements in Computational Science — COE 2255, CPS 1192, CPS 3330, CPS 3450, MTH 3310 and a CSI Science or Engineering 3-hour elective. Electives: CPS 2680 or CPS 3465 or MTH 3110.

Minor requirements in Computer Science — A minimum of 15 semester hours in Computer Science including CPS 1000, CPS 1191, CPS 1192, CPS 2271, and CPS 3200; and 9 hours in Mathematics including MTH 2502, and MTH 2503.

Minor requirements in Mathematics — A minimum of 27 semester hours including MTH 2502, MTH 2503, MTH 3001, MTH 3002, MTH 3110, CPS 1191 and one additional mathematics elective.

BACHELOR OF SCIENCE IN MATHEMATICS — Core Courses: ENG 1100 or ENG 1101; MTH 1750 or STEM math option; one course from the list of Social and Cultural Values (SCV) consisting of HIS 1110, HIS 1121, HIS 1122, PSY 1200 or SOC 1105. Bridge Courses: ENG 1102; 3-6 hours from Humanities (List B) **; 3-6 hours in two disciplines from Social and Behavioral Sciences (List C) **; 6 hours including PHY 2411 from Natural and Physical Sciences (List D); USS 1000 and 1 semester credit from Health and Physical Activity (List A). **Six total credits in humanities (List B), including at least 3 credits chosen from His 1110, 1121 or 1122 and six total credits in social science in two disciplines (List C) are required. The six required humanities credits and six required social science credits may be completed through a combination of Core and/or Bridge courses.

All mathematics majors must take the following major requirements: 43 semester hours in mathematics including MTH 2001, MTH 2002, MTH 2502, MTH 2503, MTH 2540, MTH 3001, MTH 3002, MTH 3110, MTH 3520, MTH 3521, MTH 3530, MTH 4120, and MTH 4600. Mathematics majors must also take CPS 1191, CPS 1192, and 6 hours of mathematics electives. A grade of "C" or better in these courses is required to earn a major degree in Mathematics.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN MATHEMATICS

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree.

The items with an asterisk (*) meet the Writing Across the Curriculum requirements. Minimum hours needed to obtain a Bachelor of Science in Mathematics – 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
USS 1000	Undergraduate Success Seminar	2	HHP 1XXX	HHP Activity	1
ENG 1101	Intro to Writing for College	4	ENG 1102	Writing and Research the Essay	4
ELECTIVE	From List C	3	ELECTIVE	From List B	3
SCV COURSE	HIS 1110, 1121, 1122, PSY 1200, SOC 1105	3	ELECTIVE	From List C	3
MTH 2500	Pre-Calculus	4	MTH 2502	Calculus I	4
Total		16			15
Sophomore			Sophomore		
CPS 1191	Computer Science I	4	MTH 2002	Probability & Statistics II	3
MTH 2001	Probability & Statistics	3	CPS 1192	Computer Science II	4
MTH 2503	Calculus II	5	MTH 3530	Scientific Writing and Research*	2
MTH 2540	Foundation in Mathematics	3	MTH 3002	Calculus III	4
			ELECTIVE	From List D	3
Total		15			16
Junior			Junior		
MTH 3520	Abstract Algebra I	3	MTH 3521	Abstract Algebra II	3
MTH 3001	Linear Algebra	3	MTH XXXX	Mathematics Elective	3
MHT 3110	Differential Equations	4	ELECTIVE	From List B, C, or D	3
PHY 2411	University Physics w/Lab	5	ELECTIVE	Electives	6
Total		15			15
Senior			Senior		
MTH XXXX	Mathematics Elective	3	MTH 4120	Introduction to Real Analysis	3
ELECTIVES	Electives	12	MTH 4600	Capstone	3
			ELECTIVE	Electives	7
Total		15			13

BACHELOR OF SCIENCE IN COMPUTER SCIENCE — Core Courses: ENG 1100 or ENG 1101; MTH 1750 or STEM math option; one course from the list of Social and Cultural Values (SCV) consisting of HIS 1110, HIS 1121, HIS 1122, PSY 1200 or SOC 1105. Bridge Courses: ENG 1102; 3-6 hours from Humanities (List B) **; 3-6 hours in two disciplines from Social and Behavioral Sciences (List C) **; 6 hours from Natural and Physical Sciences (List D); USS 1000 and 1 semester credit from Health and Physical Activity (List A). **Six total credits in humanities (List B), including at least 3 credits chosen from His 1110, 1121 or 1122 and six total credits in social science in two disciplines (List C) are required. The six required humanities credits and six required social science credits may be completed through a combination of Core and/or Bridge courses.

All computer science majors must take the following major requirements: CPS1000, CPS1110, CPS 1191, CPS 1192, CPS 2271, CPS 3200, CPS 3316, CPS 3320, CPS 3340, CPS 3381, CPS 4210, CPS 4420, CPS 4460, and CPS 4895; 6 semester hours from courses CPS 2215, CPS 2236, CPS 2300, CPS 3300, CPS 3325 CPS 3370, and CPS 3465; 18 semester hours in the following Mathematics courses: MTH 2001, MTH 2501, MTH 2503, MTH 3310, and MTH 3610; and 4 semester hours from Industrial Technology, INT 3520. A grade of "C" or better in CPS courses is required to earn a major degree in Computer Science.

CURRICULUM FOR THE DEGREE, BACHELOR OF SCIENCE MAJOR IN COMPUTER SCIENCE

The curriculum below is to be used in consultation with an academic advisor. The student must be familiar with the University requirements, the General Education Requirements, and any Special Requirements for the above degree. Minimum hours needed to obtain a Bachelor of Science in Computer Science – 120

Fall Semester			Spring Semester		
Course #	Title	Credits	Course #	Title	Credits
Freshman			Freshman		
ENG 1101	Introduction to Writing for College	4	SCV	HIS 1110, 1121, 1122, PSY 1200, SOC 1105	3
USS 1000	Undergraduate Success Seminar	2	CPS 1192	Computer Science II	4
CPS 1191	Computer Science I	4	ENG 1102	Writing and Research the Essay	4
CPS 1110	Computer Literacy	2	MTH 2501	Trigonometry	3
MTH 1750	College Algebra	3	CPS 1000	Ethics in Computer Science	1
Total		15			15
Sophomore			Sophomore		
CPS 2271	Data Structures	3	CPS 3316	Computer Networks	3
MTH 2001	Probability & Statistics I	3	CPS 3200	Computer Algorithms	3
CPS XXXX	Computer Science Elective	3	MTH 2503	Calculus II	5
MTH 2502	Calculus I	4	ELECTIVE	From List A	1
ELECTIVE	From List C	3	ELECTIVE	From List B	3
Total		16			15
Junior			Junior		
CPS 3320	Database Systems	3	MTH 3310	Numerical Methods	3
CPS 3340	Computer Architecture	3	ELECTIVE	From List B, C, or D	3
INT 3520	Digital Systems	4	CPS 3381	Principles of Operating Systems	3
ELECTIVE	From List C	3	CPS XXXX	Computer Science Elective	3
ELECTIVE	From List D	3	ELECTIVE	Electives	3
Total		16			15
Senior			Senior		
CPS 4420	Software Engineering	3	CPS 4895	Senior Project	3
CPS 4460	Advanced Topics	3	CPS 4210	Artificial Intelligence	3
ELECTIVE	From List D	3	MTH 3610	Intro to Discrete Structures	3
ELECTIVE	Electives	6	ELECTIVE	Electives	4
Total		15			13

DEPARTMENT OF MILITARY SCIENCE

The Department of Military Science is a cooperative venture between the United States Army and Central State University and Cedarville University. The program supplies a Reserve Officer Training Corps (ROTC) training to full-time students. Satisfactory completion of the program may lead to a minor in Military Science, and a commission as an officer in the United States Army.

The program supplies students with an opportunity to practice leadership skills necessary in society. The emphasis of the program is on leadership development. Students are challenged to apply accepted leadership theory to practical situations. A theoretical basis of knowledge is developed through attendance in Military Science classes and courses offered in colleges throughout the University.

Army ROTC is a college elective that students can try out for up to two years with no obligation. Unlike traditional college programs, Army ROTC gives you a wide range of experiences while you work toward a degree. You will combine classroom time with hands-on experience, learning skills that are sure to give you an edge over your peers when it comes time to look for a job. ROTC provides students with opportunities to attend demanding active military courses such as: Cultural Understanding and Language Proficiency, Basic Airborne Course, Air Assault School, Combat Diver Qualification Course, Combat Survival Training, and Mountain Warfare Training. By offering such demanding training, ROTC provides students with the ability to test the limits of their mental and physical stamina.

Whether you are planning a career in the Army or the corporate world, Army ROTC is a smart elective course to take. As part of Army ROTC, you will be in the company of a diverse group of individuals with broad interests — those who were presidents of their student governments, captains of their varsity sports teams, club presidents, or members of the National Honor Society. Your studies will include Leadership Development, Military Skills, and Adventure Training.

First, an Army officer is a leader. The officer plans the organization's work, assigns tasks to others and sees that the work is done to the highest standard. In that regard, an Army officer is like a corporation manager. But that is where any comparison to the corporate world ends. Even the most junior officer routinely has 40 or more soldiers working directly under his or her control. In the corporate world it could take decades for an individual to achieve that level of responsibility. Officers do not just issue orders and disappear into the background.
They lead by example. An officer must personally undertake any task assigned to a Soldier. The level of integrity and personal conduct needed from an officer is quite high — with incredibly good reasons. Officers make decisions daily that involve millions of dollars of resources. Their judgment and skill can mean the difference between life and death for the Soldiers they command. Over the years, three words have become the hallmark of what it is to be an Army Officer. Those three words are Duty, Honor and Country. No matter what their specific duties are, or where they serve, these three words embody what it is to be an Army officer.

We are a people-oriented organization. Consequently, leadership and management skills are essential in our training program. ROTC provides you with the opportunity to become a college-educated leader and manager. You will be employed when you graduate — employed in an organization that offers competitive medical, dental, housing and retirement benefits. Let us say you decide to move on after a few years and pursue another profession. When you join your friends in the civilian world you will have no problem grasping what they are doing, and you will have far greater depth and breadth of experience.

They will admire, even envy your exposure, work, and travel experience. Trust us, whatever you decide, the experience you will gain will give you the confidence you need to be a success in college and beyond. You will have the edge because employers respect officership — Believe it!

TO HELP YOU FINANCE YOUR COLLEGE YEARS, ARMY ROTC awards scholarships. Army ROTC scholarships pay tuition and required fees and can be worth as much as $120,000 or more. They are awarded on merit — like academic achievements, extracurricular activities, and personal interviews. Scholarship winners receive a stipend ($300 first-year student, $350

sophomore, $450 junior, $500 senior) for each academic month plus an allowance for books and other educational items. Contracted Cadets earn a stipend. If you are a non-scholarship student, you can still receive the stipend as a contracted cadet during your last two years. If you are selected to receive a scholarship, you will have a commitment to the Army after completing the program. You can fulfill it by either serving part time in the Army National Guard or Army Reserve or competing for full time service on active duty. The U.S. Army is one of the most culturally diverse organizations in the nation, and Army ROTC is committed to drawing a diverse group of individuals with a broad range of interests. As part of this commitment, Army ROTC offers a limited number of scholarships specifically to those individuals who desire to attend a Historically Black College/University (HBCU).

COURSE NUMBERING SYSTEM

Courses numbered from 1000- 2099 are introductory courses or courses normally taken in the freshman and sophomore years. Courses numbered from 3000- 3099 are normally taken in the junior and senior years. Courses numbered 4000-4099 are senior-level courses.

PREREQUISITES

Students must make certain that they have the necessary prerequisites for each course. Failure to do so may result in inadequate preparation and thus failure of the course. Prerequisites are indicated at the end of each course description.

NOTE: The University reserves the right to cancel courses that have insufficient enrollment.

The curriculum may also be subject to change because of ongoing curricular revisions and program development.

ACCOUNTING

ACC 2210. Financial Accounting (I, II; 3) An introduction to the fundamentals of accounting that includes the accounting cycle for service and merchandising entities. Emphasis is on accounting language, transaction analysis and financial reporting of proprietorships, partnerships and corporations. Prerequisite: BUS 1100. Equivalent to TAG OBU001.	**ACC 2220. Managerial Accounting I (II; 3)** Use of accounting data, concepts and techniques for planning and controlling business operations. Cost flow and cost behavior as used in decision making. Prerequisite: ACC 2210. Equivalent to TAG OBU002.	**ACC 3301. Intermediate Accounting I (I; 3)** The course develops the theoretical foundation of accounting and the conceptual framework for processing and reporting financial data. Primary emphasis is placed on the asset side of the balance sheet. Prerequisite: ACC 2220.
ACC 3302. Intermediate Accounting II (II; 3) Continued study of underlying accounting theory and practice related to processing and reporting accounting information. Primary emphasis is placed on the equity side of the balance sheet to include liabilities, long-term debt and owner equity accounts. Prerequisite: ACC 3301.	**ACC 3330. Advanced Accounting (I; 3)** A study of advanced topics in financial accounting to include the treatment of accounting for consolidations, mergers, partnerships, joint-ventures and receiverships, international accounting, non-profit and governmental accounting, etc. Prerequisite: ACC 3302.	**ACC 3340. Cost Accounting (I; 3**) The study of accounting for manufacturing operations. It includes the analysis of cost systems as they relate to planning, control and reporting to facilitate decision-making. Prerequisite: ACC 2220.
ACC 3360. Accounting Information Systems (II; 3) This course exposes students to the nature and applicability of accounting information systems. It includes the consideration of how accounting systems relate to the basic concepts of information system theory. Accounting applications are discussed with an emphasis on system control and design. The computer's role in processing and reporting information is covered as well. Prerequisite: ACC 3301.	**ACC 4420. Federal Income Tax (I; 3)** A study of federal income tax as applied to individuals, partnerships and corporations. Includes discussion of current and proposed changes in tax legislation. Prerequisite: ACC 3301.	**ACC 4430. Auditing (II; 3)** The study of procedures and practices in the auditing process to attest to the fair representation of financial data. Includes the study of control and procedures to safeguard assets. Prerequisites: ACC 3330.

ACC 4450. Special Problems in Accounting (I, II; 1-3) Independent study in accounting. Includes assigned readings, research projects and conferences may be included. Open to transfer students with insufficient hours from transferred courses. Accounting majors only. Prerequisite: Permission of instructor.	**ACC 4464. Internship in Accounting (I, II, III; 1-6)** The purpose of the internship is to provide students with an opportunity to gain practical experience in the area of specialization. Eligible students must have completed their sophomore year (a minimum of 60 semester hours) of which a minimum of 20 hours must be from the business area. Generally, the student must have at least a 2.6 cumulative GPA and demonstrated potential in the major field. Consult Department Chair and Career Services to receive business internship application package. A maximum of 6 hours may be earned. Registration is needed before entering an internship program. Accounting Internship not available to students participating in the Cooperative Education Program. Prerequisite: Accounting major and junior or senior Standing.	**ACC 4495. Seminars in Accounting (II; 3)** Practical application and review of prior course work through the discussion of current problems and trends in accounting; supplemented by individual/team research in selected areas of significance. Prerequisites: ACC 3330

AFRICANA STUDIES

AFS 1200. Introduction to Africana Studies (I, II; 3) Introduction to the multi-subject and multidisciplinary field of Africana Studies (aka, Black Studies, African, Afro-American Studies, Pan-African Studies). Students will acquire the following skills sets, competencies and knowledge base: critical understanding of U.S. society, critical reflection on and understanding of cultural demographics across geographies; international/global awareness; interdisciplinary problem solving or research; appreciation of aesthetical, economical, historical, psychological, political, and social dynamics of African descent populations, including the interrelations of Africans and African Diaspora communities and cultures.		

AGRIBUSINESS

AGB 2300. Introduction to Agribusiness (I; 3) This course provides a comprehensive overview into the fundamentals and applications of agribusiness and discusses the broad spectrum of the agribusiness world. The course delves into commodity marketing, food and fiber processing channels, farm management, agricultural policy, and employment opportunities in business arenas where agriculture is the primary focus. Prerequisite: BUS 1100.	**AGB 3220. Agricultural Marketing (I; 3)** This course focuses on the fundamentals of the agricultural marketing system and the market for farm products. Students will be introduced to methods of pricing, promotion, marketing planning, purchasing, and international marketing in the agricultural sector. In addition, the course will explore the linkages between supply and demand of agricultural products as well as the role played by government agencies and cooperatives in agricultural marketing. Prerequisite: BUS 2353, AGB 2300.	**AGB 3240. Farm Management (II; 3)** The focus of this course is on examining the general farm business management concepts, including farm business records, economic concepts in decision making in farm planning, farm organization and farm management. The course will also compare management concepts which apply to the agricultural sector. Prerequisite: AGB 2300 or AGR 1150, ECO 2210.
AGB 3415. Agricultural Finance (I; 3) The objective of this course is to examine the acquisition and use of capital in agriculture. Topics covered include financial reports and analysis, liquidity, and risk; use of credit and other financial alternatives to acquire control of farm resources; credit sources and acquisition of capital; investment analysis; and decision-making. Prerequisite: BUS 3331, AGB 2300.	**AGB 4445. Agricultural Economics (I; 3)** The objective of this course is to apply microeconomic tools and concepts to explain the agricultural sector within an economic system. The course exposes Students to economic principles and concepts that emphasize the use of basic economic concepts such as profit maximization, cost minimization, elasticity's, one input and two input production, resource substitution, demand and supply to the production and distribution of agricultural commodities. Prerequisite: ECO 2220, AGB 2300.	**AGB 4745. Agricultural Policy (II; 3)** This capstone course centers on the current policy issues and policy instruments from the U.S. and international perspective. The course discusses the economic characteristics and problems of agriculture, evolution and significance of key agricultural and food policies, the interaction between climate change and agricultural production, the international dimension and domestic policies that affect agriculture. The course will also focus on welfare analysis related to application of welfare criteria and economic analysis to agriculture, food and rural development problems and policies. The course will also discuss international institutions, such as the World Trade Organization (WTO), which support food and agricultural trade. Prerequisite: ECO 2210, AGB 4445, Senior Standing.

AGRICULTURAL EDUCATION

AGED 3100. The Adult Classroom (II, 3) In this course, you will discover how to use the newest educational methods to create a student-centered classroom that's perfectly suited for adult learners. The course will address strategies for connecting with adult learners in a variety of learning environments. The course will prepare Agricultural Education students for experiences as an extension educator. Students will be required to participate in field experiences and assignments. Pre-	**AGED 3110. Agriscience Foundations (I, 3)** This course is designed for the preprofessional development of historical, philosophical, and sociological perspectives for successful teaching and learning in Agriscience. Students will have the opportunity to experience diverse school, community, and college settings, and to explore the various options in agriscience education. This course will include required participation in field experiences and assignments. Prerequisite: AGR1150. Corequisite: EDU 2500.	**AGED 3115. Addressing Diverse Populations in Agriculture (I, 3)** The course will focus on the increasingly more diverse populations of students in Agriculture. The course will provide perspective and insight to understand the needs and behaviors of a broad range of students and help develop techniques for working effectively with them. Students will be required to participate in field experiences and assignments. Pre-Requisites: AGR 1150 or AGB 2300.

Requisites: AGR 1150 or equivalent Course.		
AGED 3200 Plan, Conduct, Advocate This course will allow students to gain the specialized, targeted training needed to work with non-formal, and community-wide settings that are needed in planning programs involving a wide range of participants. Centering on Agricultural Education, this course will allow students to explore the current trends and needs regarding non-formal programming in communities. The emphasis of this Program Planning will be within urban and suburban Agricultural Education settings. This course may be taken concurrently with an extension internship, where students gain experience in the content to support learning. Pre-Req: AGR 1150	**AGED 4100. Methods of Teaching Agriculture Education (I, 3)** The methods course will focus on designing curriculum, planning, and delivering lessons, building, and developing agriscience programs in public schools. Students will understand the teaching and learning process by teaching their peers created lessons and assessing the learning. Pre-requisites: AGR 1150, or equivalent course, AGED 3110 and admission to the College of Education.	**AGED 4110. Student Leadership Organizations (II, 3)** This course provides students with the organizational and historical understanding to be able to organize, manage, coordinate, deliver, and evaluate co-curricular, educational programs in student development and leadership. The roles and responsibilities of advisors for student organizations as well as practical and motivational aspects of experiential learning will be included. Students will be required to participate in field experience and assignments. Pre-requisites: AGR 1150 or AGB 2300.
AGED 4300 Communication in Community This course is designed for the educators planning to work in non-formal settings (i.e., Community Outreach, Extension Programs, and Afterschool Programming, etc.). The students will learn about a variety of communication theories that are applicable to non-formal education. Topics will include marketing workshops to appropriate audiences, creating catchy advertisements, writing for non-formal educational settings, proper written and oral communication, and communicating goals, program plans, and strategic plans with stakeholders. A variety of communication modalities will be explored including press releases, flyers, social media posts, newsletters, speeches, podcasts, etc. Students will leave with a portfolio of communication items that will be useful in the future for a program of their interest. Students may enroll concurrently with an extension internship to gain experience in the content of support learning. Pre-Req: AGED 3100, AGED 3110, AGED 3115, AGED 1010, or AGED 2200.	**AGED 4500 Extension Internship** This course consists of a semester-long placement in a non-formal extension education program. The purpose of the Internship Experience is to provide opportunities for students to develop, refine, and evaluate their pedagogical and anagogical skill levels. The possibilities are endless, but each student should have a chance minimally to apply and test professional knowledge and skills, participate in and assume responsibility for educator activities, develop both personal and professional competence under typical non-formal teaching conditions, evaluate readiness to enter the profession, prepare to meet the demands faced by beginning career educators; and develop skills in reflective decision making. The Internship Experience is the single most valuable professional experience and should be conducted alongside an outstanding cooperating educator. The extension internship course may be taken concurrently with other Agricultural Education courses to reinforce and support learning of content. This course is repeatable four times.	

AGR 1150. Introduction to Sustainable Agriculture (I, II, III; 3) This course introduces conservation techniques for the production of food, fiber and other plant and animal products using farming techniques that protect the environment, public health, human communities and animal welfare. Both local and global issues of agricultural and food production sustainability will be explored from environmental, social, political and economic aspects. Three lectures per week. Course may be taught online. Prerequisite: None.	**AGR 1220. Horticulture (II, III; 4)** This course introduces the basic principles and practices of horticulture including the structure, development, growth, distribution and utilization of fruits, vegetables, and ornamental plants. Focus will be on plant response to environmental conditions and sustainable management techniques. Three one-hour lectures and one, three hour lab per week. Prerequisite: None.	**AGR 1250. Principles of Precision Agriculture (I; 3)** This course introduces the basic principles and practices of precision agriculture including the history, applications, terminology, platforms, data, software, and associated components available for use to improve yield and sustainability in agriculture systems. Career opportunities in the precision agriculture field will be explored. Three one-hour lectures per week. Prerequisite: None
AGR 2150. Introductory Animal Science (I; 4) An introduction to the field of animal science: Students will be exposed to fundamental information on comparative functional anatomy and physiology of livestock, poultry, and companion animals. Emphasis will be placed on basic knowledge and its practical utility central to animal health and the use of animals for food production. The class meets three days a week and a three hour lab. Prerequisite: AGR 1150.	**AGR 2340. Careers in Sustainable Agriculture (I; 1)** This course introduces students to career choices in sustainable agriculture through highlighted speakers. Students will interactively discuss the pros and cons of various careers and the required skill sets and level of education for each. Students will also begin development of their professional resumes for future application to internships and other avenues of employment. One hour per week. Required of Sustainable Agriculture majors. Prerequisite: Sophomore standing, Sustainable Agriculture major.	**AGR 2350. Community Agriculture (I, III; 3)** This course introduces the social, economic, and ecological foundations of civic agriculture and sustainability. Topics will include community-based food systems, supply chains, urban agriculture, food deserts and farmer markets. Students are expected to engage in a public problem-solving situation involving agriculture and feeding or nutrition/health programs. There is a service-learning component to this course and all students are expected to participate in provided opportunities for at least 10 documented hours outside of the scheduled lecture time. Prerequisite: AGR 1150.
AGR/WRM 2450. Soil Science (I, II, III; 4) This course introduces students to soils; their formation, classification, and survey. It covers physical, chemical, and biological characteristics; soil management and its role in crop production. Three hours of lecture and two hours of lab. Prerequisite: CHM 1201. **AGR/WRM 2450 Soil Science Lab** This course introduces students to soils; their formation, classification, and survey. It covers physical, chemical, and biological characteristics; soil management and its role in crop production. Lab is required as part of the four-hour course credit. Students are to register for both course and laboratory. Three hours lecture and two lab contact hours. Prerequisite: CHM 1202, PHY	**AGR 2500. Mechanical Principle in Agriculture (I, III; 3)** Students will engage in the mechanical principles utilized in animal and plant production systems. The students will learn basic skills in equipment operation, construction, electrical wiring, and plumbing. Throughout the course, students will learn critical components of site and personal safety.	**AGR/INT 3120. Agriculture Machines and Mechanization (I; 4)** This course introduces students to mechanization in agriculture which involves selection, basic design, operation, maintenance and management of machinery and power systems typically used in the agriculture field operations and in production. The course also provides an overview of precision agriculture and sensors, GPS and real time kinematic GPS, remote sensing technologies, and computer guided delivery systems for precise and targeted delivery of irrigation water, fertilizers, and pesticides. Course in particular introduces agricultural power and machinery (engines, power transmissions including hydraulics, tillage machinery, calibrations, and harvesting machines), agricultural mechanization for improved agricultural materials handling, pest control applications, agricultural

2612, and BIO 1500 or permission of the instructor.		electrification including (circuits, motors, controls) and agricultural structures plans and constructions. Three-hour lecture and two lab contact hours per week. Prerequisite: INT 1210, AGR 1150, AGR 1250 and MTH 2501
AGR 3250. Grain Crops (I; 4) This course presents a study of the history, adaptation, and distribution of cereal, forage, and miscellaneous crops around the world with emphasis on botany, physiology, and sustainable crop production. Major cereal grain crops such as corn, wheat, rice, barley, sorghum, millet, triticale, rye and oats; grain legumes such as soybean and black-eyed pea; and pseudo grains such as amaranth and quinoa will be emphasized. This class will teach the production principles of grain crops; postharvest handling; utilization options including food, feed, and biofuel; and international trade. Three, one-hour lectures and one, three-hour lap per week. Prerequisite: AGR/WRM 2450.	**AGR/WRM 3308. Environmental Law (II; 3)** A case by case study of state and federal legislation relative to water use. Federal laws relating to water and environment; Land use legislation as it impacts the management of water resources and environment is also considered. Prerequisites: WRM 2200 or AGR 1150 or permission of the instructor.	**AGR/WRM 3330. Soil and Water Conservation (II; 4)** Hydrological processes in agricultural fields - rainfall, infiltration, evaporation, evapotranspiration and runoff; Ground Water Processes; Water conservation practices; Soil erosion due to rainfall, its effect on agricultural productivity and water quality-estimating soil loss from agricultural lands using Agriculture Research Service (ARS-USDA) models - Universal Soil Loss Equation (USLE) and its revisions; Practices to mitigate soil erosion; Design of grassed waterways, terraces and conservation structures; Wind erosion -estimation using ARSUSDA models and its mitigation; An examination of the federal, state and local organizations which carry out soil and water conservation programs. Field experience includes on-site observation of soil and water conservation practices. Three-hour lecture and one hour lab/field work. Prerequisites: MTH 1750 and WRM 2200 or AGR 1150.
AGR/WRM 3335. Irrigation and Drainage (I; 3) A first course in the study of irrigation and drainage and practices. Soil structure, soil moisture processes and infiltration; evapotranspiration processes and their applications in irrigation and drainage; Models for evapotranspiration and introduction to irrigation scheduling; Irrigation and drainage practices in different parts of the world; Introduction to on farm and main systems in large scale irrigation projects. Water control and distribution in large scale systems. Sprinkler irrigation for non-agricultural purposes and the on-site observation of irrigation and drainage systems in the area. Prerequisites: MTH 1750 and WRM 2200 or AGR 1150.	**AGR 3450. Agriculture Extension (II; 3)** This course presents different forms of cooperative extension work in agriculture. Students will explore agricultural non-formal education, extension, and leadership. Oral and written communication will be stressed as students design educational training programs and professional presentations. Prerequisite: AGR 2350.	**AGR 4350. Principles of Integrated Pest Management (I; 4)** IPM constitutes a series of pest control tactics and strategies toward more sustainable agriculture, natural resources, and urban and rural health and well-being. This course introduces the principles and practices of Integrated Pest Management (IMP): Concepts, principles, development, and application of IPM. Three hours of lecture and one three-hour lab per week. Prerequisite: AGR 3250.

AGR/WRM 4406. Agricultural Development (I; 3) The role of agriculture in the economic development of the world. The course examines theories of agricultural growth and agriculture policy issues, with extensive use of case studies. Emphasis will be placed on the use of economic theory and its application to specific problems in the field of agriculture. Prerequisite: WRM 2200 or AGR 1150 or permission of the instructor.	**AGR/WRM 4420. Irrigation Systems Design (II; 4)** An applied course in the design, of on-farm irrigation systems. Advanced evapotranspiration modeling and irrigation scheduling; Design and operational principles of surface, sprinkler, and drip irrigation systems; Water losses in irrigation systems and the definitions of various efficiencies associated with on farm and main irrigation systems. Hydraulic structures associated with distribution of water systems. On-farm application equipment selection and maintenance. Irrigation system performance and irrigation water management impacts on design; Introduction to irrigation water quality. Field visits to sprinkler irrigation systems in the area. Prerequisites: WRM/AGR 3335 or permission of the instructor.	**AGR/WRM 4425 Agricultural Drainage Systems Design (II; 4)** An applied course in the design, construction, and maintenance of drainage systems for agricultural fields. Surface drainage systems layout and design. Design of hydraulic structures associated with surface drainage systems - chutes, drops, outlet structures and culverts. Surface drainage systems in irrigated areas. Subsurface system design principles. Steady state and unsteady state theories of tile drainage. Introduction to analysis of oxygen transport in root zone and the effect of submergence. Salt balance and water quality issues in subsurface drainage. System layout, construction materials and methods. Design of structures associated with subsurface drainage systems. Cost recovery of drainage systems and maintenance issues. Field visits to drainage systems in the area. Prerequisite: WRM/AGR 3335or permission of the instructor.
AGR 4430. Topics in Sustainable Agriculture (On Demand; 3) This course is designed to present an in-depth study of topics not normally covered in other agriculturally related courses. This course meets for three hours per week. The topics selected will be dependent on the needs of the student. Prerequisite: permission of the instructor	**AGR 4500. Internship in Sustainable Agriculture (I, II, III; 2)** For this non-formal experience, students will work with a faculty mentor at Central State University directly or may fulfill this requirement by doing an off-campus internship or job shadowing experience. For the latter option, the student will work with a CSU faculty mentor during and upon return to campus to prepare and present a written and oral presentation for credit. Course meets minimum of four contact hours per week. Required for the major in sustainable agriculture. Prerequisite: sophomore standing and permission of the instructor.	

ART

ART 1001. Fundamentals of Design I (I; 3) An introductory course designed to explore the basic principles and elements of art and design. The exercises will emphasize black and white compositions.	**ART 1002. Fundamentals of Design II (II; 3)** A second level design course intended to explore the basic principles and elements of art and design. The exercises will emphasize color compositions. Prerequisite: ART 1001.	**ART 1101. Beginning Drawing I (I; 3)** An introductory drawing course designed to expose the student to a variety of approaches and media used in creative drawing.
ART 1102. Beginning Drawing II (II; 3) A follow-up course to introductory drawing. Increased complexity of drawing assignments and emphasis on	**ART 1110. Ancient and Early European Art History (I, II; 3)** A survey of visual arts from prehistoric times through the Gothic Art.	**ART 1120. Later European Art History (I, II; 3)** A study of art of the Renaissance and Post Renaissance with attention to the influences of and differences among

the spatial element of visual art will be experienced.		the art of the Renaissance, Mannerism, Baroque, Rococo, and the Modern World.
ART 1200. Introduction to Photography (I, II; 3) An introductory course in photography designed to convey proper picture-taking techniques through the study of photographic composition. Students will also learn to manipulate, and output digitized photographic images utilizing industry standard image processing software.	**ART 1210. Introduction to Art (I, II; 3)** An approach to the understanding and enjoyment of art involving analysis of media and the elements and principles of visual organization. The course also surveys styles reflecting diverse cultural attitudes. Exposure to many works of art will be included.	**ART 1320. Introduction to Art Education (I; 3)** This course introduces the student to the profession of teaching art education. The class content consists of the history of art education, discipline-based art education, and multicultural art electronic media. Students will learn to use industry-standard drawing and image processing software.
ART 1415. Art for Early Childhood Education (I, II; 2) This course introduces the student to the four components of art education: Art History, Art Criticism, Aesthetics and Art Appreciation. Art production, discipline-based art education, multicultural art education and exploration with suitable two-dimensional and three-dimensional materials for art production for kindergarten (early childhood) will be emphasized. Technology and internet use will be integrated for classroom research. The student will produce a professional notebook consisting of three sections emphasizing the following: art education readings/summaries, art lessons and activities and art history readings/summaries on artists. Classroom observation is required.	**ART 1421. Art Education for Teachers (II; 3)** This course introduces the student to four components of art education: (1) art production, (2) art history, (3) art criticism, and (4) aesthetics/art appreciation. Art production, discipline-based art education, and exploration with suitable two-dimensional and three-dimensional materials for art production for kindergarten - 12th grades will be emphasized. Technology and internet use will be integrated for classroom research. The student will produce a professional notebook consisting of the four components of art education using technology, the internet and library for research tools.	**ART 1422. Secondary Art Education (I; 3)** This course introduces the student to further experimentation and exploration with materials and methods for art education. It includes emphasis on three-dimensional design and professional art education literature. Technology and internet use will be integrated for classroom research. The student will read, write about, and discuss art education theory and educational psychology, create art, and define and identify pedagogical approaches for the teaching of art. Teaching, producing one art lesson in an urban public school, and classroom observation are required.
ART 1523. Creative Art Teaching (II; 3) This course introduces the student to producing a rubric for an academic teaching year. National and state of Ohio content standards will be the guiding format for the production of the rubric. The rubric will consist of the following: (1) student's aim and rationale for teaching the units, (2) unit themes, (3) scope and sequence of art activities, (4) day-to-day lesson plans, (5) supportive art education theory, (6) adapted design for classroom demographics (diversity/challenged and gifted students), (7) materials and safety, and (8) the list of professional references. Use of technology and the internet will be integrated for classroom research.	**ART 2010. Introduction to Two-Dimensional Computer Art (I; 3)** Beginning-level course designed for students with very little or no prior knowledge of computers or their graphic applications. Students will acquire basic computer skills and be introduced to the creative possibilities and applications of two-dimensional computer graphics and electronic media. Students will learn to use industry-standard drawing and image processing software.	**ART 2020. Image Processing for Artists (II; 3)** This course builds on concepts learned in ART 2010. In addition to the continued development of skills in image processing for presentations and graphic design, students will explore advanced creative possibilities that will add depth to their visual foundations. Prerequisite: ART 2010.
ART 2100. Figurative Drawing and Sculpture (II; 3) This course introduces the study of the human figure in two-dimensional and three-dimensional form. This course will employ theories and techniques in drawing and sculpting	**ART 2130. Arts of Africa (I, II; 3)** This course is a general survey of the arts of Africa with emphasis on the visual and plastic arts. Supplemental information will be covered on music, dance, drama, and other cultural influences.	**ART 2140. African American Art History (II; 3)** This is a course that surveys the origin and development of African American art and artists. Studies will cover various media, processes and techniques used by the artists. Attention

realistic interpretations of the human figure through observation.		is given to the subject matter and content in the work of African American artists from a social, cultural and educational point of view
ART 2200. Figure Drawing and Painting I (I, II; 3) This course explores technical experiences in oil painting while practicing sustained drawing from the figure. Emphasis will be placed on traditional painting techniques utilizing the live model.	**ART 2400. Beginning Ceramics (I, II; 3)** An introduction to the use of clay as a creative material for personal expression. The course will emphasize the basic concepts of wheel throwing, hand construction and glazing of clay forms.	**ART 3020. Computer Desktop Video for Artists (II; 2)** Students will learn how to create presentations by mixing editing. Prerequisite: ART 2010.
ART 3061. Graphic Design I (I; 3) This course covers advertising theory, techniques and use of studio equipment, safety practices, and projects geared toward concept-thinking in advertising design.	**ART 3062. Graphic Design II (II; 3)** This course continues to build on concept-thinking and visual resolution learned in ART 3061. In addition, students will explore typography and basic page layout.	**ART 3065. Introduction to Illustration (II; 3)** An introductory course in illustration that allows the student to devote time to studying the fundamentals of drawing, composition, color, harmony, perspective, cartooning, and the proportions of the human figure. Traditional and digital media will be used.
ART 3070. Web Design and Development 1: (On Demand; 1) This course will provide a basic understanding of the methods and techniques of developing a simple to moderately complex website. This course will equip the student with key industry standard software and design knowledge, that will support a foundational understanding of website creation and application. Prerequisite. ART 2010.	**ART 3100. Advanced Drawing (I, II; 3)** Advanced techniques for figure, still life, and landscape compositions. A variety of media will be explored (i.e., charcoal, pastels, contè, and ink).	**ART 3150. Modern and Contemporary Art History I (I; 3)** An analytical and interpretive study of art movements from the 19th century to the present with emphasis on their significance in relation to contemporary civilization.
ART 3160. Modern and Contemporary Art History II (II; 3) An advanced art history course that takes a geographical or regional look at modern and contemporary art.	**ART 3200. Figure Drawing and Painting II (I, II; 3)** Advanced painting from the figure incorporating environment. Course work will focus on observation of the live model and environment.	**ART 3300. Figure and Advanced Drawing I (I, II; 3)** This course will explore a variety of media and techniques in compositional drawing. Assignments will stress advanced figure drawing techniques, with emphasis on traditional drawing techniques and composing the figure within an environment.
ART 3400. Advanced Drawing and Painting I (I, II; 3) In this course students will develop drawings as studies for paintings. The course will examine the historical use of drawings as studies for paintings and as finished works of art. Students will develop drawings and paintings for graduate school portfolios.	**ART 4061. Advanced Graphic Design I (1; 3)** This course gives the advanced graphics student the chance to execute finished art using advanced techniques and equipment. Basic production techniques will be covered. Prerequisite: ART 3062.	**ART 4062. Advanced Graphic Design II (II; 3)** This course will emphasize through projects the continuation of good design execution from ART 4061. At this point in a student's artistic development he/she should have a specific graphic focus in mind. Prerequisite: ART 4061.
ART 4200. Figure Drawing and Painting III (I, II; 3) This course will address advanced figure painting concerns. Emphasis will be placed on creative painting compositions utilizing the figure in combination with the study of 'old master' paintings. Students will create work for graduate school portfolios.	**ART 4300. Figure and Advanced Drawing II (I, II; 3)** The course will emphasize the development of the student's personal drawing style while focusing on the figure in an interior and/or landscape environment. Students will develop drawings for their senior exhibitions and graduate school portfolios.	**ART 4400. Advanced Drawing and Painting II (I, II; 3)** This course will explore further the historical relationships between drawing and painting. Students will utilize drawings as preliminary studies for painting as well as finished works of art. Students will also develop drawings and paintings for their

		senior exhibitions and graduate school portfolios.
ART 4751. Senior Art Show 1 (I, II; 1 credit) Supervised independent study encompassing all phases of preparation and completion of the Senior Art exhibition. The Senior candidate should submit 10 representative samples of their work for possible selection in the show. The number of works accepted for their exhibition depends on the provided gallery space and the number of graduates. The Senior Art Show will take place in the Art Gallery during April of the student's last year of coursework. Open only for Seniors. *The students will learn about the research process, ideation, and creation of artists statements for their senior art show exhibit. ART 4751 Senior Art Show 1 will be a preparatory class for students in ART 4752 Senior Art Show 2.* Prerequisite: Permission of instructor.	**ART 4752. Senior Art Show 2 (I, II; 1 Credit)** Supervised independent study encompassing all phases of preparation and completion of the Senior Art exhibition. The Senior candidate should submit 10 representative samples of their work for possible selection in the show. The number of works accepted for their exhibition depends on the provided gallery space and the number of graduates. The Senior Art Show will take place in the Art Gallery during April of the student's last year of coursework. Open only for Seniors. *In ART 4752 Senior Art Show 2 will build on the research from its companion course ART 4751 Senior Art Show 1. The students will learn about the gallery procedures for framing, curatorship of the exhibit, and final placement of works.* (Gallery). (Prerequisite: ART 4751 Senior Art Show 1)	

BIOLOGY

BIO 1100. Organismal Biology with Lab (I, II, III; 4) This course is an introduction to the principles of biology related to organismal structure and function. Topics include cell organization, levels of biological organization, and whole-body systems. Three one-hour lectures and one two-hour laboratory period per week. No prerequisites. Does not count towards a degree in Biology. Fulfills the general education 182 requirement for natural science with lab.	**BIO 1300. Genetics and Diversity with Lab (I, II, III; 4)** This course is an introduction to the principles of biology related to the inheritance of characteristics and their change over time. Topics include reproduction, basic genetics, population genetics, evolution, and the diversity of organisms. Three one-hour lectures and one two-hour laboratory period per week. No prerequisites. Does not count towards a degree in Biology. Fulfills the general education requirement for natural science with a lab.	**BIO 1500. Environmental Science with Lab (II, III; 4)** This interdisciplinary course relates biological, chemical, and physical principles to how organisms interact with their environments. The emphasis is on the scientific and social aspects of human impact on the planet. Environmental issues and policies will also be discussed. Three one-hour lectures and one two-hour laboratory period per week. No prerequisites. A requirement for the minor in Environmental Science. Fulfills the general education requirement for natural science with a lab.

BIO 1705. Biological Concepts (I, II, III; 4) An introduction to the basic concepts used in the study of biology. Topics to be covered include metrics and measurement, scientific instrumentation, microscopy, the cell and cellular metabolism and genetics (Mendelian and population). Class will meet for three hours of lecture per week and two hours of lab. Corequisite: MTH 1750.	**BIO 1801. Fundamentals of Biology I (I, II, III; 4)** A study of the fundamental concepts of biology designed to acquaint majors with the scientific method and to develop critical thinking and problem solving skills through hands-on exploration. Emphasis is placed on the gathering and analysis of data and the writing of formal lab reports. Topics covered include biological implications of chemical processes such as pH and molecular interactions, the structure and function of biomolecules (DNA, RNA, and proteins), cell structure, evolution, cell division, Mendelian and introductory population genetics, ecology, energy utilization through metabolism and photosynthesis. Three lectures and one three-hour laboratory period per week. Prerequisites: ACT composite score of at least 18, or SAT composite score of at least 950, or BIO 1705, or CHM 1201. Equivalent to TAG OSC003 (Combination of OSC003 and OSC004 equals OSC024).	**BIO 1802. Fundamentals of Biology II (I, II, III; 4)** A continuing study of the fundamental concepts in biology with emphasis placed upon the evolution and diversity of organisms and their interactions through a survey of Kingdoms Prokarya, Fungi, Plantae, and Animalia as well as the Protists. The semester culminates with emphasis on animal tissues, homeostasis, and organ systems. Three one-hour lectures and one three-hour laboratory period per week. Prerequisite: B10 1801. Equivalent to TAG OSC004 (Combination of OSC003 and OSC004 equals OSC024).
BIO 2000. Evolution (II; 2) A study of evolutionary processes and the history of life on earth. Topics of discussion include evidence supporting the theory of evolution gathered from fossil records, classical genetics, population biology, organismal behavior, and changes in DNA over time. Three lecture/discussion periods per week. The course is taught as a mini-term class, consisting of half a semester. The remaining half of the semester slot will be a second mini-term course. Required for the Education degree in Life Science. Fulfills the general education requirement for natural science. Prerequisite: BIO 1100, 1300 or BIO 1801.	**BIO 2050. Biology of the Environment with Lab (I, III; 3)** This course studies biodiversity in the environment of ecosystems and landscapes with emphasis on identification using standard taxonomic keys, natural history, and molecular phylogenetic analysis. It includes environmental and ecological factors affecting organisms and focuses on conservation and management of natural areas. Four lectures/laboratory periods per week. Prerequisites: BIO 1500 or BIO 1801.	**BIO 2060. Environmental Microbiology (I; 4)** This course encompasses how bacteria found in soil, water and air interact with humans and the environment. Topics to be covered include microbial diversity, measures and sustainability of ecosystem health, bioaccumulation and bioremediation of pollutants, the fate of microbial pathogens in the environment, water quality, and microbial biochemistry. Three hours of lecture/discussion periods per week and one three-hour laboratory period per week. Prerequisite: BIO 1801.

BIO 2100. Writing for Life Sciences (I, II, III; 3 credits) The course offers instruction to the skill-based, scientific writing practices (i.e., literature searching, referencing, abstract writing, figure/table generation, manuscript generation/review and resume/CV generation) required to prepare products such as lab reports, manuscripts presentations and internship applications in scientific fields. Prerequisite: ENG 1102.	**BIO 2200. Biology of Aging (II, III; 2)** A course covering the biology of human aging. It will examine the mechanisms of aging followed by the consequences of aging in all of the human organ systems including nervous, skeletal, endocrine, alimentary, reproductive, respiratory, excretory, cardiovascular, muscular, lymphatic, and integumentary and immune systems. Required for the sociology minor in gerontology and fulfills the natural science requirement for the general education. Does not count towards a major in Biology.	**BIO2350 Bioethics (II;2)** Bioethics is an interdisciplinary subject that is neither biology nor ethics but, rather, a melding of both disciplines. Bioethics studies the reasonableness of human choices and actions that typically occur in a research or medical setting. Emphasis is placed on examining the merits and harm of decision making while examining self-bias and preconception. This course is offered as a partial term course with BIO2000, Evolution. Prerequisite: BIO1801.
BIO 2400. Molecular Genetics (I, III; 4) This course focuses on the study of heredity from different, yet integrated perspectives. The first is the historical, quantitative, and tactical approach of Mendelian Genetics; the second study of the environmental dynamics impacting the passage of traits through local and global communities (population genetics); the last involves examining DNA at the qualitative and conceptual level of molecular mechanisms of replication, gene regulation, expression, and mutation. Additionally, the class offers opportunities to examine the impact of current genetic research on individuals, society, and decision making. Three lecture periods and one three hour laboratory period per week. Prerequisite: BIO 1801.	**BIO 2650. Microbiology (II, III; 4)** Microbiology, in the most literal sense, deals with the study of small organisms. The primary focus of the course is the study of human pathogens. Emphasis is placed on the isolation and identification of bacteria through traditional staining methods and metabolic testing as well as through the application of molecular tools such as PCR and ELISA. Mechanisms of pathology and antibiotic resistance will be examined as well as host defenses and the immune response. Non-bacterial pathogens such as viruses and parasites will also be discussed in relationship to disease. Alternate areas of microbiology, such as environmental and food microbiology, will be discussed. Three lecture/discussion periods and one three-hour laboratory period per week.	**BIO 2750. Zoology (I; 2)** This course deals with the basic characteristics, taxonomy, phylogeny, geologic and geographic distribution, behavior and ecology of the major animal groups. Consists of three one-hour lecture and one three-hour laboratory per week. The course is taught as a mini-term class, consisting of half a semester. The remaining half of the semester slot will be a second mini-term course, BIO 2850. Prerequisite BIO 1802.

	Required for BIO and ENE majors. Prerequisite: BIO 1801.	
BIO 2850. Plant Biology (I; 2) This course is an exploration of the structural and functional relationships in mosses, lower vascular plants and vascular plants. The morphology, anatomy, reproduction, function and basic biochemistry of plants and their growth and development will be covered. Consists of three one-hour lecture periods and one three hour laboratory period per week for 7 weeks. The course is taught as a mini-term class, consisting of half a semester. The remaining half of the semester slot will be a second mini-term course. Prerequisite BIO 1802.	**BIO 2900. Introduction to Evolution (I, II, II; 4)** Knowledge of the basic concepts of evolution is essential to understand biological process and general human health. Hence this course is designed for students of any major to understand and appreciate the scope of evolutionary principles in sciences. This course introduces the rapidly advancing field of evolution and its genetic basis in the context of its applications to agriculture, general health, nature conservation and everyday life. The class meets online, three times a week and 184 has a two hour per week remote laboratory component.	**BIO 3050. Developmental Biology of Vertebrates (II; 4- Odd Years)** This course is a comprehensive survey of the history of vertebrates through their comparative early development with an integration of descriptive, experimental, biochemical, and molecular approaches. Besides vertebrate models, insects, sea urchins, and helminths models will also be used. Students will compare the development of selected vertebrate models and examine the mechanisms responsible for their differences and similarities. Three lecture and one three-hour laboratory per week. Prerequisite: BIO 2750, or AGR 2150 and BIO 1802.

BIO 3070. Comparative Anatomy of Vertebrates (I; 4, Even Years) This course explores the comparative morphogenesis and adult structures of the vertebrate system with emphasis on phylogenetic relationships of vertebrates. Organ systems to be studied include integumentary, skeletal, muscular, reproductive, digestive, circulatory, sensory and urogenital systems. Three lectures and one three-hour laboratory per week. Prerequisite: BIO 2750; or AGR 2150 and BIO 1802.	**BIO 3150. Bioinformatics (II; 3 – Odd Years)** Genomes are biological information storage devices. DNA sequencing has made it practical to describe entire genomes. The field of biology is devoted to interpreting this data is called "bioinformatics." The course combines elements of molecular biology, evolution and computer science all used to gain understanding of biomolecules. The student will utilize public databases and software tools to manipulate data and extract meaning. Additionally, the course will touch on the use of software tools that enable better experimental design and modeling. The central theme of the course is to train students to use DNA sequence information to problem solve. Prerequisite: BIO 2400	**BIO 3500. Ecology (I, III; 4)** Ecology is the study of the environment and organisms interacting within it. The course concentrates on basic principles of ecology (e.g. biomes, water and nutrient cycles, energy stratification, organismal interactions, and population genetics) then places these in the context of modern global problems (e.g. deforestation, pollution, acid rain, extinction, global warming). Three lecture / discussion periods and one three-hour laboratory period per week. Field work will take advantage of local resources such as the Tawana Woods, Indian Mound, and Glen Helen. Prerequisites: BIO 2750 and BIO 2850.
BIO 3550 Medicinal Plants (II; 4 – Even Years). This course explores historic and current ethnopharmacology and ethnobotany contributions to the health and well-being of humans. The biochemistry of major classes of plant secondary compounds is explored, and primary resources are used to determine the efficacy of specific secondary compounds used for skin, hair, teeth, the digestive and reproductive systems, pain, and internal wellbeing. Course includes 3 hours of lecture and one, 3-hour lab per week. Pre-requisites: BIO 2850; CHM 2401.	**BIO 3660. Toxicology (II, III; 3 - Even Years)** Toxicology is the branch of biology that studies toxins and the organisms that produce them. The learning outcome of the course is to develop a clearer understanding of the chemical structures, functions and biological activities of various toxins produced by organisms such as snakes, scorpions, spiders, marine invertebrates, fungus, plant, and microbes. The course will examine applications of these toxins in the development of therapeutics for treatment of human diseases, e.g., cancer. Prerequisites: BIO 2750 and CHM 2401.	**BIO 4100. Molecular Cell Biology (II; 4)** An in-depth investigation of the fundamental unit of life – the cell, following two major themes: evolutionarydevelopment and molecular mechanisms. Emphasis is placed on the eukaryotic cell, but prokaryotic cells are examined comparatively. Course topics include detailed examination of organelles, structure/function relationships, diversity as it relates to function, and cellular coordination at the tissue, organ, and organism levels. Lastly, the course studies what happens when normal cellular processes go awry (i.e., genetic diseases, prions, and cancer). BIO 4100 is the designated upper level

BIO 4150. Immunology (I, II; 3) Principles of basic vertebrate immunology in health and disease will be discussed. The student will understand the cellular and soluble factors associated with innate and adaptive immunity, and how the human body fights diseases. It will also describe the consequences of autoimmunity and immunodeficiency and their impact on human health. The course meets for three hours per week for lectures with no laboratory component. Prerequisite: Microbiology BIO 2650.		writing intensive course for the biology major. A grade of C or higher is required to meet graduation requirements. Three lecture/discussion periods and one three-hour laboratory period per week. Prerequisite: BIO 2400 & CHM 3300.

BIO 4300. Environmental Plant Physiology (II; 4 – Odd Years) This course is an investigation of the structure, function, physiology and 185 biochemistry of vascular plant growth and its interaction with a changing environment. Topics to be explored include water relations, translocation, mineral nutrition, photosynthesis and photorespiration, plant hormones and their roles in growth, dormancy, photoperiodism and flowering, and responses to environmental stimuli. The student is expected to develop an experimental design and complete a research project. Three lecture/discussion sessions and one three-hour laboratory period per week. Prerequisites: BIO 2850 and CHM 2401.	**BIO 4350. Agroecology (I, II; 4)** This course will focus attention on agricultural systems from an ecological perspective, and how such systems can contribute to a more sustainable society. Topics covered in the class will include basic ecological concepts (i.e., the biological, chemical and physical factors and their interactions and how they affect plants/crops) and their application to agricultural systems; production and consumption aspects of food systems; and ways to facilitate the promotion of sustainable agriculture. The course is divided into three modules designed to introduce the students to increasingly complex concepts of agroecology. Problem based learning provides the students with opportunities to discuss and research case studies corresponding to each of these levels of complexity. Prerequisites: BIO 1802, AGR 1150, and AGR 3330.	**BIO 4400. Animal Physiology (II; 4-Even Years)** A study of the concepts and principals involved in the function of animal tissues, organs, and organ systems. Emphasis will be placed on the application of physical and chemical principles on the cell function in which transport, electrical activity of the cell membrane and cell contractility will be discussed, followed by the physiology of most organ systems in animals. Three lecture/discussion periods and one three-hour laboratory period per week. Prerequisite: BIO 3070.
BIO 4500. Undergraduate Research in Biology (I, II, III; 2) Undergraduate research experience in which a student will work with a mentor to develop a research topic, work on semi- independent research, and present this topic in written and oral format. Students may work with a faculty mentor at Central State University or fulfill this requirement by doing an off-campus internship or job shadowing experience. For the latter option, the student will work with a CSU faculty mentor upon return to campus to prepare and present a written and oral presentation for credit. Required of Biology and Education, Life Science majors. This course may be repeated for credit. Prerequisites: BIO 1802 and CHM 1202.	**BIO 4600. Selected Topics in Biology (On demand; 2-3)** This course is designed to present an in-depth study of topics not normally covered in other courses. The topics selected will be dependent on the needs of the student. Prerequisite: Permission of the instructor.	

BUS 1100. Contemporary American Business (I, II; 3) This basic course introduces current American business and its functional areas. An overview of Management, Marketing, Management Information Systems, Accounting, Economics, and Finance is presented. Business terminology and career opportunities will be discussed. Current business topics will be examined.	**BUS 1500. Computer Applications for Business (I, II; 3)** This course introduces students to the role of information systems in business and develops competencies in the operation of computer hardware and contemporary business applications software.	**BUS 2200. Legal Environment of Business (I, II; 3)** Introduction to basic legal institutions including the structure of the court system, schools of legal thought, and the nature of the judicial process. An in-depth study of the law of general contract couples with an in-depth study and comparison of the law of sales under the Uniform Commercial Code. Prerequisite: BUS 1100. Equivalent to TAG OBU004.
BUS 2203. Professional Development (I, II; 2) This course emphasizes the importance of knowing the nuances of etiquette in today's business environment. It assists students in developing professional and social skills needed in today's corporate environment and in building self-confidence, credibility creating a winning image.	**BUS 2260. Business Communications (I, II; 3)** An introduction to current business communication practices to include computer skills for written reports, and oral 186 presentations. Emphasis is placed on current technology as used in contemporary business, as well as clear, concise, accurate, thorough and truthful written and oral communications. Prerequisite: BUS 1100 and ENG 1102, and sophomore standing. Equivalent to TAG OBU005.	**BUS 2261. Business Communication II (I, II; 3)** This course will compete the study and development of business communication skills which began in BUS 2260, with emphasis on adapting clear, concise, complete, and correct communications to the challenges of global business environments such as cultural nuances. Students will analyze samples of emails, memos, executive summaries, and create written and spoken communication of business operations. Prerequisites: ENG 1102, BUS 2260 and sophomore standing.
BUS 2353. Principles of Marketing (I, II; 3) This course is the study of the process of buying and selling of goods and services. Emphasis is placed on marketing strategies and consumer response to those strategies. Marketing strategies for buying and selling for both wholesale and retail markets are included. Prerequisite: BUS 1100, ECO 2210, ENG 1102.	**BUS 2400. Management and Organizational Behavior (I, II; 3)** This course explores the foundational concepts of management as they relate to individuals as well as in an organizational context. Students in this course are exposed to management as a competitive advantage and as it applies to the creation of organizational strategy. This course covers topics including conflict management, leadership, motivating employees, organizational culture, and team development. Prerequisite: BUS 1100. Course Equivalent: TAG OBU012.	**BUS 2801. Business Calculus I (I, II; 3)** The first of a two-course sequence in differential and integral Calculus in Business. This course stresses limits and derivatives of continuous functions, including sum and difference rules, product and quotient rules, power and chain rules, and second order derivatives. Prerequisite: MTH 1750.
BUS 2802. Business Calculus II (I, II; 3) The second of a two-course sequence in differential and integral Calculus for Business. This course stresses integral business calculus, with the relationship between differential and integral calculus. Prerequisite: BUS 2801.	**BUS 2903. Business Statistics (I, II, III; 3)** This course introduces the basic tools of statistical analysis with the emphasis on the application of these tools to decision-making and problem solving in business. Business applications are integrated in this course. Prerequisite: BUS 2802. TAG OBU013.	**BUS 3331. Principles of Finance (I, II; 3)** A study of financing, capitalization, and expansion of modern business enterprises. Course includes financial institutions, securities, markets, and rates; financial statements, taxes, depreciation and cash flows; financial statement analysis; and the time value of money. Prerequisites: ACC 2210, ACC 2220, and BUS 1100.

BUS 3370. International Business (I, II; 3) This course surveys business practices on six continents, emphasizing the relationship between the U.S. and other countries. 187 International commerce is impacted by differing languages, terminology, laws, customs, politics, and economics. Emphasis is placed on finance, management, and marketing. Prerequisites: BUS 3331, 2343 and 2353.	**BUS 3510 Data Analytics & AI Applications (I, II, III; 3)** This course provides a broad introduction to big data analytics and artificial intelligence. This course will teach future business professionals how to apply cutting-edge big data analytics and artificial intelligence concepts and techniques to solve a variety of business problems. The course will cover various topics i.e., raw data manipulation, statistical analysis, visualization using the programming language and statistical environment R, supervised learning, unsupervised learning, artificial intelligence in retail/ healthcare, social big data analytics, neural network, and business intelligence. Prerequisite: BUS 2903	**BUS 4466. Internship in Business (On Demand: 1-6)** Course provides the opportunity to explore practical experience in business. Student activities will be supervised the organization sponsoring the internship. The Office of Career Services and the responsible faculty monitor internships. A comprehensive report is required at the completion of the internship. Prerequisite: Permission of the instructor.
BUS 4785. Operations Management (I, II; 3) A survey course in production and operations management that covers managerial concepts and the quantitative tools used in the design, planning, operation, and control of production systems. Prerequisite: BUS 2801, BUS 2802, BUS 2901, BUS 2902	**BUS 4795. Strategic Management and Policy (I, II; 4)** This "Capstone Course" is a study of strategic planning. The importance of environment scanning and identifying strategic factors in external and internal environments are stressed. Course examines the present state of the national economy, the impact of stakeholders in the task environment, common methods of portfolio analysis, and possible significance of technological change to individual firms and entire industries. Individual research or case analysis is required. Prerequisite: Senior standing.	

CHEMISTRY

CHM 1050. Chemical Concepts (I, II; 3) This course covers some of the basic mathematical skills needed for success in chemistry courses as well as introducing basic concepts of chemistry. The course is designed to help students who have not had high school chemistry or who wish to review before beginning the General Chemistry sequence. Three one hour lecture/ discussion sessions per week.	**CHM 1150. Elements of Chemistry (I, II; 4)** This course is intended to meet the needs of students' general education core who are not majoring in a science area. This course will show the relevance of chemistry to socially important problems, and in the process introduce concepts such as chemical bonding, stoichiometry, and acid/base equilibria. Three one- hour lectures and one two-hour inquiry-based laboratory per week. Fulfills the general education requirement for Natural Sciences with lab.	**CHM 1201. General Chemistry I (I, II; 4)** This course begins a sequence which supplies a foundation in chemistry for science majors. Topics covered include atomic structure, bonding, stoichiometry, thermochemistry, periodic law, gas laws, and solutions. Three one-hour lectures and one three-hour lab per week. Pre- or corequisite: MTH 1750 or higher. Equivalent to TAG OSC008 (Combination of CHM 1201 and CHM 1202 equals OSC023).

CHM 1202. General Chemistry II (I, II; 4) This course completes the sequence begun in CHM 1201. Topics covered include kinetics, equilibria, pH, solubility, thermodynamics, and electrochemistry. Three one-hour lectures and one three-hour lab per week. Prerequisite: CHM 1201. Equivalent to TAG OSC009 (CHM 1201 and CHM 1202 equals OSC 023).	**CHM 1610. Introduction to Forensic Science I with Lab (I, II; 4)** This course is intended to meet the needs of students' general education core. This course will provide a foundation for the different aspects of science used to solve crimes and most importantly enforce justice in our society. Some of the topics covered are: 1. Processing the crime scene, 2. Hair, fibers and paints analysis, 3. Drugs control and identification, 4. Forensic toxicology, 5. Aspects of arson and explosions, 6. Forensic serology, 7. Forensic anthropology, 8. Fingerprints, 9. Firearms and tool marks, 10. DNA. There are two and a half hours of lecture and one-and-a half-hour lab period each week. Laboratory exercises will be selected to reinforce the materials covered during lecture. Prerequisites: High School math and chemistry.	**CHM 2200. Quantitative Analysis (I; 4)** This course is a study of the theory and practice of classical methods of chemical analysis. Gravimetric analysis and volumetric techniques based on acid/base, precipitation, complexation, and oxidation/reduction reactions will be covered. Three one-hour lecture/discussion sessions and one four-hour laboratory per week. Prerequisite: CHM 1202.
CHM 2401. Organic Chemistry I (I; 4) This course begins a two-semester sequence dealing with the chemistry of 188 carbon compounds. The course begins with a discussion of the structure and reactivity of covalent compounds, including acid-base properties, kinetics, and stereochemistry. The course then begins a systematic discussion of the various organic functional groups and their reactions. Three one-hour lectures and one four-hour lab per week. Prerequisite: CHM 1202.(CHM 2401 and CHM 24024 are equivalent to TAG OSC010).	**CHM 2402. Organic Chemistry II (II; 4)** This course continues the sequence begun in CHM 2401. The systematic discussion of functional groups is continued along with some coverage of the synthesis of organic compounds and spectroscopic identification of them. Three one-hour lectures and one four-hour lab per week. Prerequisite: CHM 2401. (CHM 2401 and CHM 2402 are equivalent to TAG OSC010).	**CHM 2600. Introduction to Forensic Science II (II: 4)** This course will provide a foundation for the different aspects of science used to solve crimes and enforce justice in our society. Some of the topics covered are: Organic analysis & Inorganic analysis, drugs, control and Identification Forensic Toxicology; Techniques and the significance of toxicological findings, forensic aspects of arson and explosion investigation, forensic serology, forensic anthropology, DNA, the future forensic tool. There are three hours of lecture and a two hour lab period each week. Laboratory exercises will be selected to reinforce the materials covered during lecture. Prerequisites: CHM 1610 and CHM 1201 or CHM 1202.
CHM 3050. Chemistry Seminar (II; 1) This course is designed to introduce chemistry majors to recent advancements in sciences, as well as current and ongoing research carried in this field. This course will also help all majors to carry out the required undergraduate research as well as enhancing their chances for better careers in their field or future graduate studies. Presentations will be made by faculty and guest speakers. Required for all chemistry majors. Prerequisite: Junior standing.	**CHM 3100. Introductory Inorganic Chemistry (I; 3)** This course introduces fundamental concepts and theories of the electronic structure of the atom. It will cover Schrödinger equation, group theory and the quantum chemistry of various rotors, the structure of the periodic table, covalent, bonding, molecular spectroscopy, as well as different properties of various compounds. 3 one-hour lectures per week. Prerequisites: CHM1202, PHY 2412.	**CHM 3300. Introduction to Biochemistry (I; 3**) This course will offer a foundational look at biomolecules such as sugars, lipids, phospholipids, steroids, vitamins, and hormones with a cellular perspective. Structural aspects of DNA, RNA, and proteins will be examined as they relate to biological functions. The course meets three hours per week. Prerequisites: CHM 2402 and BIO 1801.

CHM 3501. Physical Chemistry I (I; 3) This course is an introduction to the laws of classical thermodynamics and their applications to systems at equilibrium. Three one-hour lecture/discussion sessions per week. Prerequisites: CHM 1202 and PHY 2412.	**CHM 3502. Physical Chemistry II (II; 4)** A continuation of the study of thermodynamics and equilibrium followed by a study of electrochemistry, kinetics, and an introduction to crystal structures. This course also highlights the fundamental ideas of quantum mechanics and their applications. The laboratory portion of the course emphasizes the measurement of the physical and thermodynamic properties of organic and inorganic compounds. Three one-hour lecture/discussion sessions and one four-hour laboratory per week. Prerequisite: CHM 3501.	**CHM 3600. Introduction to Radiochemistry (I; 4)** This course and its corresponding laboratory will cover nuclear theory, concepts and calculations, control, handling and use of radioactive materials, fundamentals, principles of radiochemistry, separation chemistry concepts, principles of Alpha and Gamma spectrometry as well as principles of liquid scintillation counting and mass spectrometry. Three hours of lecture and one three hour lab. Prerequisites: CHM 1202; PHY 2411.
CHM 3797. Selected Topics in Chemistry (On demand; 3) This course is designed to provide greater coverage topics that do not normally get in-depth coverage in other courses and to present new concepts in chemistry. Topics to be covered may come from any area of chemistry and will be selected on the basis of student and faculty interest. The intent of this course is to provide an opportunity for students to 189 become familiar with an area or areas of current research interest. May be repeated for credit. Prerequisite: Permission of instructor.	**CHM 4100. Advanced Inorganic Chemistry (I; 4 – Odd Years)** This course is designed to introduce the theories underlying modern inorganic chemistry. Atomic structure, ionic and covalent bonding, and acid/base behavior are emphasized. Group theory, valence bond, molecular orbital, crystal field, and ligand field bonding models will be employed. Laboratory experiments will illustrate the synthesis and properties of inorganic materials. Three one hour lectures and a three-hour laboratory each week. Prerequisites: CHM 3100.	**CHM 4200. Instrumental Analysis (I; 4 - Even Years)** This course deals with modern instrumental methods of chemical analysis. The principles of the design and construction of various types of spectrometers, chromatographs, and electro analytical instruments will be discussed with emphasis on the advantages and limitations of these methods. Laboratories will involve application of these principles. Three one-hour lecture/discussion sessions and one four -hour laboratory per week. Prerequisite: CHM 2200.
CHM 4300. Biochemistry (I; 4) This course involves the study of chemical and molecular reactions which regulate metabolism and the chemistry of life-sustaining processes. Bioenergetics will be studied at the molecular level and additional topics include enzyme-substrate binding as well as first and second order kinetics. Experimental work covers the chemical and physical properties of selected biological molecules and associated analytical techniques. Three one-hour lecture/discussion sessions and one four-hour laboratory per week. Prerequisites: CHM 3300.	**CHM 4400. Advanced Organic Chemistry (II; 3 – Even Years)** This course uses concepts of kinetics and thermodynamics learned in physical chemistry to explain the properties and reactions of organic compounds. Three one hour lecture/discussion sessions per week. Prerequisites: CHM 2402 and CHM 3501.	**CHM 4500. Advanced Quantum Chemistry (II; 3 - Odd Years)** This course will explore various types of quantum systems. It will highlight: 1. The transformation of electrons to fermions, and how that leads to the Pauli exclusion principle, 2. The transformation of photons to bosons and how that is related to radios and laser, 3. The quantum tunneling and its relation to nuclear emission of alpha particles and 4. The updates and highlights of the quantum field theory and the relation between waves and particles. Prerequisite: CHM 3502.
CHM 4600. Advanced Forensic Science (II; 4) This course will provide information for the different aspects of science used to solve crimes and enforce justice in our society. Some of the topics covered are: organic and inorganic analysis, drugs, control and identification, forensic toxicology, techniques and the significance of	**CHM 4791.Undergraduate Research I (I, II, III; 2)** This course offers the opportunity for an advanced chemistry major student to do independent research on a problem. Four hours of laboratory and/or library effort per week are required. A written report is required to be submitted by the student as part of the course requirements for completion.	**CHM 4792. Undergraduate Research II (I, II, III; 2)** This course offers the opportunity for an advanced chemistry major student to be independent on a problem and expand upon that independent research for a second semester. For hours of laboratory and/or library effort per week are required. A presentation, poster, and written report

toxicological findings, forensic aspects of arson and explosion investigation, forensic serology, forensic anthropology, and DNA, the future forensic tool. There are three hours of lecture and a three-hour lab period each week. Laboratory exercises will be selected to reinforce the materials covered during the lecture. Prerequisites: CHM 2200, 2600 and 4300	Prerequisite: CHM 4200 and Senior standing.	are required to be submitted by the student as part of the course requirement for completion. Prerequisite: CHM 4791.
CHM 4895. Integrated Concepts of Chemistry (II; 3) This course uses several case study problems to apply and reinforce concepts learned in previous chemistry courses. Three one-hour discussion sessions per week. Prerequisite: 25 hours of chemistry courses.		

COMMUNICATIONS

COM 2200. Introduction to Mass Communication (I; 3) This course introduces students to the history, theories, and models of the mass communication process; and the structure, dynamics and effects of print and electronic media on the individual and society. The course includes discussion of the structure and development of minority and international media with an emphasis on social, cultural, economic, and political implications. Prerequisite: ENG 1102. Equivalent to TAG OCM0006.	**COM 2214. Public Speaking (I, II; 3)** Students learn message preparation and presentation, with emphasis on formal speeches, including informational, demonstrative, and persuasive speeches. Students learn primary theories of communication and analyze the methods used by professional speakers. Required of all communication majors.	**COM 2219. Introduction to Media Writing I (II; 3)** This course introduces students to proper grammatical structure and writing styles used by journalists and communication professionals. Students will be introduced to basic writing formats for various forms of communication, including print journalism and electronic media. Students will develop language usage and grammar skills and learn Associated Press Style. Emphasis will be placed on critical thinking and writing on deadlines. Prerequisite: Passing grade of C in ENG 1102.
COM 2220. Introduction to Social Media (II, 3) This course provides students with a comprehensive introduction to social media. It covers historical, economic, and commercial components of the field as well as social, legal, and ethical considerations. Coursework examines the struggle between beneficial and detrimental aspects of digital media, the societal influence of interactive platforms, and the reciprocal relationship between humans and communication technologies.	**COM 2230. Professional Development (I, II; 1)** This course covers professional ethics, etiquette, and dress. Students learn job search strategies, networking skills, and interview techniques. They learn how to write a cover letter and resume. They also learn how to research graduate schools, prepare for the graduate exam, and apply to graduate school.	**COM 2272. Principles of Electronic Media (II; 3)** This course introduces students to the history, characteristics and practices of major electronic media including radio, television, movies, the Internet and other telecommunications. Prerequisite: COM 2200.
COM 2400. Introduction to Photojournalism (On Demand; 3) This course teaches news reporting through visual media. It includes sections on basic	**COM 3300. Electronic Media Production and Direction: Radio (I, 3)** This course covers principles and practices of over-the-air, satellite, and digital radio	**COM 3306. Communication Research Methods (I; 3)** This course examines the theoretical underpinnings, strategies and methods of contemporary research in

photographic techniques, such as composition, framing, lighting, focus, exposure, camera handling, and scanning. It also includes caption and cutline writing, news judgment, journalism ethics, publication design, desktop publishing, and computer manipulation of images. Prerequisite: COM 2200. Equivalent to TAG OCM011.	productions such as news, commercials, documentaries and programming. Prerequisite: COM 2272.	communication. Emphasis is placed on theories and methods used by print and electronic media in identifying and analyzing audiences. Prerequisites: COM 2219, COM 2200 and MTH 1550 or permission of the instructor.
COM 3308. Film Image And Social Reality (On Demand; 3) This course provides for the detailed study of films, particularly those with a minority theme or cast, and the reality the films attempt to portray. Students engage in film analysis, paying close attention to a film's script, themes, production values, acting, setting, and cultural/historical context. The course also may include consideration of the history, technology, and business practices of the film industry. Prerequisite: COM 2200.	**COM 3314. Advanced Public Speaking (On Demand; 3)** This course will examine and practice the skills necessary to become an effective speaker. The course emphasizes modes of speech. Students will practice persuasive, motivational, and humorous speeches; study historic speeches that made impact on the world; and learn how to research and write longform speeches. COM 2214 is recommended.	**COM 3315. Writing for Electronic Media (II; 3)** This course introduces students to the writing and formatting of scripts for electronic media with special emphasis on the writing of scripts for radio and television news programs. The course may also include the writing of commercials, sitcoms, drams, and documentaries. Prerequisites: COM 2219 and COM 2272.
COM 3319. Reporting (I; 3) This course introduces students to the fundamentals of journalism. It covers news 191 gathering and news writing including the writing of both hard news and feature stories. The course builds on the grammar, language, and style lessons of COM 2219. Prerequisite: COM 2219.	**COM 3323. Voice and Diction (On Demand; 3)** This course explores how to develop a satisfactory speaking voice. It is designed to deal with problems of articulation and voice quality in various settings. Prerequisite: None.	**COM 3326. Argumentation and Debate (On Demand; 3)** This course involves the study and practice of basic principles in reasoned discourse and their application to a variety of issues. It includes the history of rhetoric and criticism and a review of principal rhetoricians from ancient to modern times. Prerequisite: None.
COM 3330. Public Relations Principles and Practices (I, 3) This course introduces students to the theories, processes, functions, and practices of public relations. It includes a discussion of the external and internal publics of public relations. Prerequisites: COM 2200 and COM 2219 or permission of the instructor.	**COM 3400. Broadcast Media Production and Direction: Television and New Media (II; 3)** This course provides students with practical training in production, programming and direction. Students work in teams to produce television and new media productions such as news, commercials, sports programs, and documentaries. The course includes video editing. Prerequisite: COM 2272.	**COM 3460. Introduction to Sound Engineering and Recording (On Demand; 3)** This course covers techniques of electronic music including analog and digital sound generation and manipulation, control systems, MIDI, and Macintosh basics; it includes hands-on work with audio editing software. Prerequisites: COM 2272 and COM 3300.
COM 3894. Practicum in Journalism and Electronic Media: (I, II; 1) The practicum is an on-campus pre-professional activity related to the student's career path or interests in the field of communication. Prerequisites: COM 2200, 2219 and permission of the Program director. Total practicum hours may not exceed two credit hours toward graduation. Required of all majors and for graduation.	**COM 4447. Media Law and Ethics (II; 3)** This course covers the history and structure of media regulation and their socio-political ramification. It includes extensive discussion of First Amendment rights and ethical issues relating to mass media. Prerequisites: COM 2200 and COM 3319 or permission of the instructor.	**COM 4450. Media Management (On Demand; 3)** This course covers the history and structure of media ownership and the variables that constrain the operations of media organizations. The course includes a discussion of globalization. Prerequisite: COM 2200 and COM 3306.

COM 4460. Broadcast Announcing and Delivery (On Demand; 3) This course introduces students to voice techniques used in the field of broadcasting. Effective delivery and postural techniques for on air television and radio will receive special attention. Prerequisites: COM 2214.	**COM 4895. Senior Capstone and Portfolio Assessment (II; 3)** This course is a 192 comprehensive assessment of student knowledge and work in the major field. Students complete a professional-quality portfolio under the direction of a faculty member. Required of all majors and for graduation. Prerequisite: Senior status.	**COM 4896. Internship in Journalism and Electronic Media (I, II, III; 3)** An internship is an off-campus, part-time placement in a professional setting for students to gain practical experience in the student's career path or interests in the field of Communication. Students are expected to learn operational and managerial skills that are required for entry-level positions. Complete internship guidelines are available from the program director, who assigns the course grade. The program director assigns the course grade. Prerequisite: COM 4892, and junior status and permission of the program director. Total internship hours may not exceed three credit hours toward graduation. Required of all Communication majors and for graduation.
COM 4897. Independent Study (On Demand; 1-3) An independent study is a research project or course of study, not a performance activity and not otherwise offered as an existing course. The individual study may carry 1-3 semester hours. Before the end of the previous semester and in consultation with the departmental advisor, the student must submit a proposal to the department chair. Prerequisites: COM 2200, 2219, 3306, and permission of the department chair.		

COMPUTER SCIENCE

CPS 1000 Ethics in Computer Science (I, II; 1) This course explores ethical issues that arise due to widespread use of computer technology. Students will become familiar with issues related to professional ethics, ethical use of the internet, privacy issues, property rights of software, accountability, and social implications of information technology.	**CPS 1110. Computer Literacy (I, II, III; 2)** This course presents students with a study of various systems and methods of problem-solving by computers and other means through use of examples, simple exercises and theory. Further topics include using computer systems for word processing, Internet browsing, PC spreadsheets and databases, and other desk top publishing techniques.	**CPS 1191. Computer Science I (I, II; 4)** This course is designed to introduce programming using C++. Topics include algorithms, flow-chart, pseudo-code, top-down design, branching, looping, arrays strings, basic input and output (I/O) operations, scientific applications using C++ programming language. Prerequisite: MTH 1750 or permission of the instructor.
CPS 1192. Computer Science II (II; 4) Importance of program design, modular function and object-oriented programming; flow-charting, pseudo-code, and top-down design, use of text files, binary files, and fundamentals of	**CPS 2215. Internet Web Essentials (Even Years, II; 3)** This course teaches students topics pertaining to World Wide Web (WWW) fundamentals, contemporary Web browsers, Web editors, Web development tools, Internet tools and services, Internet searching, web site	**CPS 2236. Contemporary Operating Systems (I; 2)** The objective of this course is to teach basics of an operating system from the point of view of both end-users and programmers. Existing popular operating systems such as Windows, Linux and Mac OS will be used

higher languages such as C/ C++. Prerequisite: CPS 1191.	design, web page publishing, JavaScript, Java Applets, CGI, Web security, creating dynamic web pages using a database and other web enabling tools.	as practical examples to work with. Students will learn about the history of Operating Systems, Computer Security Basics, Desktop Virtualization, Disk Operating System (DOS) and the Command-Line Interface, Windows, Linux, and Mac OS X. Prerequisite: None.
CPS 2271. Data Structures (I; 3) This course introduces students to data structures, including topics on linked lists, doubly linked lists, circular lists, stacks, queues, search strategies, hashing, internal sorting algorithms, external sort / merge algorithms, binary trees, Trees, B +- trees, sequential files, random access files, file update algorithms, bit maps, and memory management algorithms. Prerequisite: CPS 1192.	**CPS 2300. Cyber Security I (I, on demand; 3)** The objective of this course is to introduce students to the field of cybersecurity, network, and internet architecture. Students will study technologies, security protocols, policies and practices designed to protect networks, 193 computers, programs, and data from attacks. The students will also learn about viruses and other vulnerabilities, and cyberattacks and the techniques for identifying, detecting, and defending against cybersecurity threats. Prerequisite: CPS 1191.	**CPS 3200 Computer Algorithms (II; 3)** This course covers the modern theory of algorithms, common algorithmic paradigms, the relationship between algorithms and programming, basic performance measures and analysis techniques for real world problems. The course goal is to provide a solid background in algorithms for computer science students, in preparation either for a job in industry or for more advanced courses at the graduate level. Prerequisite: CPS1192.
CPS 3300. Cyber Security II (On demand, II; 3) This is the second cyber security course after Cyber Security I. The student will learn contemporary security technologies and issues, infrastructure security management processes, risk analysis, security planning, analysis and safeguards, industrial espionage, cyber terrorism, information warfare, security policies, contingency planning, incidence handling and response, and security standards. Prerequisite: CPS 2300.	**CPS 3316. Computer Networks (II; 3)** This course teaches students fundamentals of computer networks, covering topics on local and wide area networks, media, topologies, layered networking models, hardware, and software; network setup and administration, network architecture, communication protocols, and aspects of network administration that include server folders and permissions. Prerequisites: CPS 1191 or its equivalent.	**CPS 3320. Database Systems (II; 3)** The objective of this course is to introduce relational database systems and provide practical experience in using a popular database package. Contemporary database systems such as Oracle and Microsoft Access will be used extensively in this course. Students will learn about relational database principles, the SQL query language, application development using forms, creating, and using tables and queries, database design and implementation issues. Prerequisites: CPS 1192 or permission of instructor.
CPS 3325. Java Programming (II; 3) The objective of this course is to teach the basics of Java programming and object-oriented programming. Students will learn both Applets and Application programming in Java. The topics covered include compilers and interpreters, objects and primitive data, control flow, writing classes, enhancing classes, arrays and vectors, inheritance, exceptions, I/O streams, software engineering, recursive programming, and implementation of data structures. Prerequisites: CPS 1191 or its equivalent.	**CPS 3330. Data Analysis & Visualization (I, II; 3)** This course will introduce data analysis and visualization. The students will learn the key aspects of how to process, analyze, and visualize data. Topics include describing and gathering data from various sources, such as raw text files, web APIs, and data repositories, and statistical references. The course will use existing computational tools and programming libraries to solve various problems. Toward the end, the course will cover how to handle powerful data analysis and visualization libraries, packages and tools that can be utilized in an array of domains and platforms.	**CPS 3340. Computer Architecture (I; 3)** The goal of this course is to give students a solid foundation in the fundamental concepts of CPU, memory system and I/O system design, and to expose them to a number of more advanced topics in these areas. Instruction set architecture, memory subsystem organization, interfacing concepts and issues arising in managing communication with the processor. Prerequisite: CPS 1192.

	Prerequisite: MTH 2001 and CPS 3320.	
CPS 3465. High Performance Computing (II; 3) Fundamentals of parallel computing including shared memory paradigm, semaphores, and dead lock; distributed memory paradigm including point-to-point and collective message passing constructs in MPI, parallel I/O, vector and structure derived data types; speed-up and scalability, checkpoint restart, parallel debugging; techniques, performance profiling, graphical and visualization techniques; parallel libraries, and systems modeling applications in high performance computing. Prerequisite: CPS 2271 and MTH 2503 or permission of the instructor.	**CPS 3550 Python Programming (I, II;3).** This course will introduce Python as one of the fundamental programming languages. Topics include basic programming concepts, such as variables, lists, classes and loops, basic math and text operation, variants of arrays, dictionary and set objects, and functions and parameter passing. This course will also include advanced topics on objects, classes, and object-oriented features. In addition to that the course will cover how to handle powerful Python libraries, packages, and tools for game design, visualization, and web applications frameworks. Prerequisite: CPS 1191.	**CPS 3381. Principles of Operating Systems (I, II; 3)** This course teaches students fundamental concepts and principles of operating systems and their structures, including topics on concurrency, semaphores, classes, deadlocks, CPU scheduling algorithms, disk scheduling algorithms, memory management, disk management and file systems. Prerequisite: CPS 2271 or permission of the instructor.
CPS 4210. Artificial Intelligence (II; 3) Introduction to concepts, principles, challenges, and research in major areas of technical AI research. Areas of discussion include natural language and vision processing, machine learning, machine logic and reasoning, expert systems, and robotics. Prerequisite: CPS 2271.	**CPS 4420. Software Engineering (II; 3)** This course teaches students design and implementation issues for large software systems, software life cycle, requirements definition and specification, prototyping, verification, validation, equivalence classes and testing, fault-tolerance, social and ethical issues of commercial software, user interface, design, portability, and management. The goal of this course is to introduce students to methods for producing large-scale 194 commercial software. They learn techniques for managing hardware, software, and personnel systems using a group-oriented project production paradigm. Prerequisite: CPS 2271.	**CPS 4460. Advanced Topics (I, II, III; 1-3)** This course is designed to meet the needs of advanced students as preparation for graduate study or students who are interested in modern topics that are not presented in other courses. Projects required in CPS 4460 must be distinguished from those in other courses. Prerequisites: Permission of instructor.

CPS 4895. Senior Project (I, II; 3) Students work under the mentorship of a faculty member to design, implement and present a capstone computer science project. Each student selects a topic for the project subject to approval of the faculty mentor, conducts a feasibility study and prepares a project design using flowcharts, structure charts and pseudo-code along with documentation and references. Each student must implement the project design and submit all program listings, data files, and report listing showing results of appropriate test runs. Each student must write a paper on the project from the external documentation and prepare appropriate visual aids for an oral presentation of the project to the Department. Prerequisite: CPS4420 or permission of the instructor.		

COOPERATIVE EDUCATION

COE 2255. Parallel Cooperative Education (I, II, III; 6) The Cooperative Education Program offers students an opportunity to integrate classroom theory with practical "real world" work assignments that alternate formal coursework with employment in business, industry, government, and the non-profit sector. Employers assign work which is relevant to each student's academic degree program or career interests, provide on-the-job training and supervision, and evaluate performance on a regular basis. COE 2255 provides credit for the student who has 30 - 60 semester hours, and who is combining a	**COE 2299. Alternating Cooperative Education (I, II, III; 12)** The Cooperative Education Program offers students an opportunity to integrate classroom theory with practical "real world" work assignments that alternate formal coursework with employment in business, industry, government, and the non-profit sector. Employers assign work which is relevant to each student's academic degree program or career interests; provide on-the-job training and supervision and evaluate performance on a regular basis. COE 2299 provides credit for the student who has 30-60 semester hours, and who is combining a	**COE 3355. Parallel Cooperative Education (I, II, III; 6)** The Cooperative Education Program offers students an opportunity to integrate classroom theory with practical "real world" work assignments that alternate formal coursework with employment in business, industry, government, and the non-profit sector. Employers assign work which is relevant to each student's academic degree program or career interests, provide on-the-job training and supervision, and evaluate performance on a regular basis. COE 3355 provides credit for the student who has 61-90 semester hours, and who is combining a

part-time co-op job with coursework during the same semester. Prerequisites: Department approval and 30-60 credit hours.	part-time co-op job with coursework during the same semester. Prerequisites: Department approval and 30-60 credit hours.	part-time co-op job with coursework during the same semester. Prerequisites: Department approval and 61-90 credit hours.

COE 3399. Alternating Cooperative Education (I, II, III; 12) The Cooperative Education Program offers students an opportunity to integrate classroom theory with practical "real world" work assignments that alternate formal coursework with employment in business, industry, government, and the non-profit sector. Employers assign work which is relevant to each student's academic degree program or career interests; provide on-the-job training and supervision and evaluate performance on a regular basis. COE 3399 provides credit for the student who has 61-90 semester hours, and who is combining a part-time co-op job with coursework during the same semester. Prerequisites: Department approval and 61-90 credit hours.	**COE 4455. Parallel Cooperative Education (I, II, III; 6)** The Cooperative Education Program offers students an opportunity to integrate classroom theory with practical "real world" work assignments that alternate 195 formal coursework with employment in business, industry, government, and the non-profit sector. Employers assign work which is relevant to each student's academic degree program or career interests, provide on-the-job training and supervision, and evaluate performance on a regular basis. COE 4455 provides credit for the student who has 90 or more semester hours, and who is combining a part-time co-op job with coursework during the same semester. Prerequisites: Department approval and 91 or more credit hours.	**COE 4499. Alternating Cooperative Education (I, II, III; 12)** The Cooperative Education Program offers students an opportunity to integrate classroom theory with practical "real world" work assignments that alternate formal coursework with employment in business, industry, government, and the non-profit sector. Employers assign work which is relevant to each student's academic degree program or career interests, provide on-the-job training and supervision, and evaluate performance on a regular basis. COE 4499 provides credit for the student who has 90 or more semester hours, and who is combining a part-time co-op job with coursework during the same semester. Prerequisites: Department approval and 91 or more credit hours.

CRIMINAL JUSTICE

CRJ/PSC/PSY/SWK/SOC 2206. Statistics for Social and Behavioral Sciences (I, II; 4) This course provides students with an introduction to basic statistical techniques used by researchers in the social and behavioral sciences. Major topics include frequency distributions, measures of central tendency and variation, regression and correlation, and hypothesis testing. A computer lab is required with this course. Prerequisite: MTH 1750 or MTH 1550, grade "D" or better.	**CRJ 2210. Introduction to Criminal Justice (I, II; 3)** An overview of the criminal justice field including its historical development, contemporary structures and functions, and emerging trends in each segment of the system. Equivalent to TAG OSS031.	**CRJ 2220 Introduction to Courts (On Demand; 3)** This course covers the historical and contemporary perspectives on law and the courts. Students will also learn about the various functions of the courts at the federal, state, and local levels as well as the personnel, pretrial and trial processes, plea bargaining, sentencing, and trends in adjudication.
CRJ 2310. Corrections in America (II; 3) An overview of the American correctional system as it relates to local, state, and federal correctional agencies. The course will cover the history and development of correctional policies and practices, criminal sentencing, jail, prisons, alternative sentencing, prisoner rights, rehabilitation and parole and probation. Current philosophies of corrections and the issues surrounding the roles and effectiveness of criminal sentences, institutional procedures, technological developments and special	**CRJ 2330. Police and Society (II; 3)** An introductory course which provides students with an overview of the role of the police in American society. It will explore diversity and critically evaluate the direction and trends in modern police agencies. Particular attention will be given to the origins of policing, the nature of police organizations and police work, and patterns of relations between the police and the public. Prerequisite: CRJ 2210. Equivalent to TAG OSS032.	**CRJ 2410 Research Methods (On Demand; 4)** This course covers the major techniques/criminological researchers use to answer empirical questions. Major topics include conceptualization, measurement, sampling, research designs (quantitative and qualitative, surveys), evaluation, and ethical issues in research as they specifically apply to criminal justice. Students will design and conduct research utilizing quantitative or qualitative research. Prerequisites: Must be a criminal justice major; CRJ 2210 with a grade of "C" or better, SOC 2206 with a

CRJ 2500. Criminal Justice for Cybersecurity (II, 3). This course gives students a history in the evolution of the criminal justice system and how the criminal justice system functions. This includes functions of law enforcement, courts, and corrections. Additionally, there is a focus on the challenges the criminal justice system faces with the evolving technology used in crime from the perspective of the courts, prosecution, and law enforcement. Students will also be introduced to how law enforcement investigates cybercrime as well as special considerations prosecutors must consider when prosecuting these types of cases. Prerequisites: Enrolled in Cybersecurity certificate program or degree program or consent of instructor.		
CRJ 3305. Criminal Investigation (On Demand; 3) This course will help students understand the investigative process as it relates to developing a criminal case. This includes how an investigation is started, the elements of an investigation, and the process of identifying or eliminating an individual as a suspect. Students will also be exposed to how investigators locate key witnesses, as well as identifying the difference between an interview and interrogation. Prerequisites: CRJ and CRJ 2330.	**CRJ 3310. Criminal Procedures (I; 3)** This course covers the basic constitutional rights associated with the investigation and adjudication of criminal cases. Particular attention is given to the problems of arrest; search and seizure; self-incrimination; coerced confession; wiretapping; right to counsel; bail; speedy trial; discovery; plea bargaining; double jeopardy; and the retroactive effect of decisions. Prerequisite: CRJ 2210.	**CRJ 3320 Crime Prevention (On Demand; 3):** This course will offer a well-rounded exploration of evidence-based policies, programs, and practice in crime prevention. With a focus on criminological theory and emphasizing the social, psychological, and biological roots of crime, this course presents current research, perspectives, and examples that capture the key crime prevention concepts in reducing crime and victimization. Students will be required to assess the vulnerability of an establishment to crime and strategies to resolve vulnerabilities. Prerequisites: CRJ 2210; SOC 3333, Sophomore standing.

CRJ 3335. White-Collar Crime (I; 3) This course will examine various crimes referred to as white-collar crime. The types of crimes explored will include different forms of illegal business activities, fraud, bribery, computer crimes, medical and educational crimes, embezzlement, tax evasion, conspiracy and organizational crimes, and crimes committed by the government. The purpose of the course will be to describe, analyze and assess the social impact of these types of offenses as well as examine the responsibilities, powers and activities of various agencies which have jurisdiction over these crimes. Prerequisites: CRJ 2210 and SOC 3333.	**CRJ 3340. Criminal Law (II; 3)** An examination of the central principles of criminal law, which include the substantive elements defining criminal conduct for specific crimes and the various exculpatory conditions of criminal liability. Prerequisite: CRJ 2210 and SOC 3333.	**CRJ 3350. Crime Scene Analysis (On demand; 4)** This course will introduce students to techniques of crime scene analysis. Students learn how to photograph, map, and sketch a crime scene as well as gather various types of evidence. Students also practice how to testify in a trial setting as a crime scene investigator. A one-hour lab is included with this course. Prerequisite: Permission of Instructor.
CRJ 3351. Seminar in Criminal Justice (I; 3) An in-depth analysis of a contemporary issue in criminal justice. Topics may include, but are not limited to, issues related to women in crime, sex crimes, juvenile crimes, and computer crimes. Prerequisites: Completion of six semester hours in criminal justice courses and CRJ 2210 (Students may only take this course twice with different topics).	**CRJ 3362. Administration of Correctional Institutions (II; 3)** An examination of classifications, training, treatment, security, custody, and discipline in correctional institutions. Prerequisites: CRJ 2210 and 3310	**CRJ 4421. Police Organization and Management (II; 3)** Administrative structures, functions and supervision of personnel in police organizations. Various models will be studied. Prerequisites: CRJ 2210 and 2330.
CRJ 4432. Probation and Parole (I; 3) Basic principles of probation of juveniles and adults. Topics include presentence, pre-hearing, pre-parole, investigations, administrative organizations, and supervision. Prerequisites: Completion of six semester hours in criminal justice courses and CRJ 2310.	**CRJ 4510 Human Trafficking (On Demand; 3)** Human Trafficking is an upper-level course that focuses on the contemporary issues and current research of human trafficking. Students will learn terminology and advance their knowledge of the different types of human trafficking that exist as well as the scope of the problem at the domestic and international level.	**CRJ 4520 Terrorism (On Demand; 3)** This course offers students a comprehensive, interdisciplinary exploration of domestic and international terrorism in the contemporary era, focusing on post-World War II period as its primary emphasis. A serious exploration will be made of the underlying causes of terrorism as well as a review of the
populations will also be examined. Prerequisite: CRJ 2210. Equivalent to TAG OSS033		grade of "C" or better and sophomore Standing.

	Students will expand their knowledge regarding the physical, emotional, and psychological trauma experienced by victims of human trafficking. Students will also examine the various tactics used to recruit and control human trafficking victims. Finally, this course examines the roles that the government, media, and other organizations play in the exploitation as well as the prevention of human trafficking. Prerequisite: CRJ 2210 with a grade of "C" or better, SOC 3333 with a grade of "C" or better, and Junior Standing, or instructor permission.	nations, movements, and individuals who have engaged in what many refer to as terrorist violence. This course will critically examine the theories that explain the underlying causes of modern terrorist violence. Prerequisites: CRJ 2210 with a minimum grade of "C"; SOC 3333 with a minimum grade of "C" and junior standing or consent of instructor.
CRJ 4655. Juvenile Justice (I; 3) This course is designed to introduce the student to the organizations, processes and actors that comprise the Juvenile Justice System. The emphasizes the history of the juvenile justice system, the agency interactions and interrelationships, the concepts of prevention and diversion, the development of juvenile gangs, the roles of criminal justice professionals, and the future of the Juvenile Justice System. Prerequisite: CRJ 2210 or Instructor permission.	**CRJ 4895. Senior Capstone for Criminal Justice (II; 3)** This is a required course for criminal justice majors. The emphasis will be on the major areas of the criminal justice system which include law enforcement, the courts, and the correctional system. In addition, the review will cover various crime theories and reporting agencies. Students will develop a comprehensive project that reflects their understanding of one of the three areas of criminal justice system. The use of crime theories and statistical data bases (i.e., UCR, BJS, and other data websites) will be expected. Prerequisite: SOC 2206, SOC 3800 and senior standing.	**CRJ 4896. Internship in Criminal Justice (I, II; 4)** This course will consist of students working directly in a criminal justice agency or setting. The course will give students hands-on experience within the field of criminal justice. Students will work 12 hours a week at the location chosen by the student and criminal justice faculty advisor. Prerequisites: A minimum of 12 hours in criminal justice and prior approval from the faculty advisor responsible for the internship.

DRAMA

DRM 1100. Introduction to Theatre (I; 3) A study of the history and workings of the theatre together with the reading of 3-5 selected exemplary plays.	**DRM 2201. Development of Drama: Tragedy (I; 3)** A study of tragic dramatic literature and its criticism from classical through contemporary periods.	**DRM 2202. Development of Drama: Comedy (II; 3)** A study of comic dramatic literature and its criticism from classical through contemporary periods.
DRM 2204. African American Theatre (Odd years - II; 3) Development of African American Theatre (genres, artists, social impact, and literature).	**DRM 2215. Acting I (I; 4)** Basic training and practice in vocal, physical, and creative process skills for the actor. Will include study and experimentation in preparation of improvised and scripted scenes. Emphasis on contemporary character and role development. Equivalent to TAG OAH027.	**DRM 3315. Acting II (II; 4)** Advanced theory and practice of acting. Emphasis on period style in character and role development. Continued improvisation and scripted scene work. Prerequisite: DRM 2215 or permission of the instructor.
DRM 3320. Theatre Design (On demand; 3) Survey of the history and use of design in theatre including contributors and major trends. Prerequisites: Two of the following: DRM 2201, DRM 2202, and DRM 2204.	**DRM 3330. Directing and Stage Management (On demand; 3)** Theory and practice in the fundamentals of play direction and stage management. Prerequisites: Two of the following: DRM 2201, DRM 2202, and DRM 2204.	**DRM 3350. Theatre Administration (On demand; 3)** Fundamentals and practice of administration for the arts: organization, fundraising, grantsmanship, contacts and agreements, and their importance as business requisites for performance. Prerequisite: Junior or senior standing.

DRM 3360. Seminar: Extensions (On demand; 3) Study and presentation of contemporary trends in 198 performance art. Prerequisites: Junior or senior standing.	**DRM 4896. Internship / Practicum (I, II; 3)** An internship is usually an off-campus activity, and the practicum is an on-campus activity with a more limited objective (or task-oriented). The practicum may be supervised by the student's departmental advisor. Before the end of the previous semester in which the student was enrolled, the student must submit a proposal to the intended supervisor and send a copy to the department chair (who later assigns the course grade). Upon completion of the activity, the student writes an exit paper and submits an evaluation form. Prerequisite: Permission of the department chair. Equivalent to TAG OAH025.	

ECONOMICS

ECO 2200. Introduction to Economics (I, II, III; 3) This course introduces non-business majors to a broad understanding of economics. It shows how an understanding of economics leads to an understanding of business structure in the United States. It also covers terms used in analyzing economic variables, social and economic institutions, and the various functions of economists.	**ECO 2210. Principles of Microeconomics (I, II; 3)** This course covers such important subjects as economic resources, scarcity, opportunity cost, supply and demand, the theory of the firm, cost of production, and various types of markets for goods and factors of production. Equivalent to TAG OSS004.	**ECO 2220. Principles of Macroeconomics (I, II; 3)** This course introduces students to important macroeconomics subjects, such as national income, aggregate consumption, employment, inflation, economic development, international economics, and the multiplier effect. Prerequisite: ECO 2210. Equivalent to TAG OSS005.
ECO 2230. Economic Growth and the Problems of Underdeveloped Nations (II; 3) (Odd Years) This course introduces an empirical and theoretical consideration of long-term economic changes, including changes in industrial technology, structure, and level of national product with emphasis on developing economies. Prerequisites: ECO 2210 and ECO 2220.	**ECO 2260. Urban Economics (I; 3 (Even Years)** This course covers development of political/economic theoretic perspectives for applied problem-solving in the urban economic context. The following problem areas will be surveyed: employment, education, poverty, crime, health, housing, transportation, and environment. Prerequisites: ECO 2210 and ECO 2220	**ECO 2270. Economic Problems of the Black Community (II; 3)** This course analyzes current economic problems based upon the history of socioeconomic roadblocks to progress
ECO 2280. Comparative Economic Systems (II – even years; 3) A study of economic decision-making, including institutions, ideology, and practices, by comparing capitalist, socialist and communistic economic systems. Prerequisites: ECO 2210 and ECO 2220.	**ECO 3300. Consumer Economics (II; 3)** This course is designed to help students become well-informed consumers in the U.S. economy. Available aides and restrictions, as well as personal budgeting, the consumer credit market, purchase of stocks and bonds, insurance, and related topics will be discussed.	**ECO 3320. Money and Banking (I; 3)** This course analyzes the nature and significance of money, the commercial banking system, the Federal Reserve System, and the impact of monetary policy on money supply and the stabilization of price levels. Prerequisites: ECO 2210 and ECO 2220.

ECO 3330. Intermediate Microeconomic Theory (II; 3) This course analyzes value and distribution, the theory of household behavior and the theory of the firm. Whenever possible, theoretic economic concepts are provided in an operational context with the main emphasis being on the tools of economic thinking. Prerequisites: ECO 2210 and ECO 2220.	**ECO 3340. Intermediate Macroeconomic Theory (II; 3)** This course is designed to implement a mathematical approach in the calculation of national income accounting, aggregate consumption, saving, inflation, employment, fiscal and monetary policy, and international trade. Prerequisites: ECO 2210 and ECO 2220.	**ECO 3350. Public Finance (I; 3)** This course analyzes principles, practice, justice, taxation, public spending, public debt, tax reform, and fiscal policy. Prerequisites: ECO 2210 and ECO 2220.
ECO 3360. International Economics (I; 3) This course evaluates comparative advantage, balance of payments, tariffs, foreign exchange, inflow and outflow of capital, and other topics related to international finance. Prerequisites: ECO 2210 and ECO 2220.	**ECO 3370. Labor Economic Problems (II; 3) (Odd Years)** This course examines demographic characteristics and labor force participation rates by various segments of the population. It includes analysis and comparisons of American and European labor unions and labor markets, as well as the impact of unemployment on the American economy. Prerequisites: ECO 2210 and ECO 2220.	**ECO 4450. Independent Study in Economics (I, II; 1-3)** This course requires supervised reading in economics for students of superior ability. It provides an opportunity for advanced work through reading, research and discussion in an area of particular interest to the student. Prerequisites: ECO 3330 and ECO 3340, at least junior standing, and permission of the instructor.
ECO 4466. Internship in Economics (III; 1-6) Students may complete an internship during the summer semester with a major organization or company. The internship is designed for the economics major to gain practical experience. Up to 6 semester hours may be earned and students must register before applying for an internship. Prerequisite: Permission of the Department Chair.	**ECO 4895. Senior Seminar in Economics (II; 3)** This course prepares seniors to discuss and present seminar papers on such economic problems as inflation, unemployment, minority economic problems, fiscal policy and topics related to international economy. This is a capstone course designed to prepare seniors for their major field exam. Prerequisites: ECO 3330, ECO 3340, and senior standing.	

EDUCATION STUDIES

EDS 2010. Introduction to Primary Education Pk-5 (I, II; 3) This course provides candidates with an overview of the major dimensions of the early childhood education, including child development from birth through thirteen years of age, theories of early childhood education, and the ethical issues relevant to early childhood education. Precandidates will apply knowledge by which students in Primary Education Pk-5 construct meaning and develop skills, including the use of different types of learning strategies and play and techniques for making knowledgeable accessible and meaningful for all students including students who are English Language Learners and students with exceptionalities. Prerequisites: Complete 30 hours of General Education courses with a cumulative GPA 2.75 or better.	**EDS 4990. Educational Studies Capstone (I, II, III; 3)** This 16-week capstone seminar focuses on the professional knowledge, skills and dispositions required of the candidates seeking a degree in Educational Studies from the Central State University, College of Education. The seminar focuses on competencies pertinent to non-licensure seeking candidates in the field of Educational Studies. Content covered includes professional ethics, skills, mindsets and dispositions, cultural responsiveness, diversity, equity, and inclusion, trauma-informed practice. A culminating thesis paper is required. Prerequisites include Senior standing and having 90% or more of the program coursework completed.	

EDUCATION PRIMARY PROGRAM

EDP 3100. Primary Social Studies and Curriculum Integration, PK-5. (I, II; 3). This course is designed to provide students with content knowledge, classroom methods, materials, and strategies for teaching Social Studies in elementary school settings, PK-5. Content knowledge in history, geography, economics, behavioral science, and political science is essential in preparing teachers to provide meaningful social studies experiences for elementary students. Students in this course will be guided through various learning activities including reading, viewing, reflection, investigations to apply the C3 Curriculum Framework (preparation for college, career, and civic life) to further increase their knowledge and understanding of the content related to teaching social studies in primary grades.	EDP 3103. Curriculum and Instruction in Mathematics for Primary Education (I, II; 3) This course will present EDP candidates with the task of developing lesson and unit plans, and instructional activities in mathematics for age-appropriate students in Pk-5 classrooms. Candidates will have the opportunity to consider the cognitive, social, emotional, and physical development of young children in relationship to the learning of mathematics concepts and skills as articulated by the Ohio Common Core Standards for Mathematics content and the National Council for Teachers of Mathematics and the National Science Teachers Association.	EDP 3104. Curriculum and Instruction in Science for Primary Education (I, II; 3) This course provides Primary Teacher Candidates with the ability to explore resources and techniques available to provide PK-5 students with a holistic, interdisciplinary understanding of science concepts and scientific thinking. This course focuses on helping the candidate uncover the major science concepts through inquiry-based science activities, then planning developmentally appropriate unit plans, instructional activities, and assessments aligned to the National Science Content Standards for the State of Ohio, and the National Science Teachers Association.

EDUCATION

EDU 1210. The Residence Life Experience (II; 3- On Demand) This introduction to the role of the Resident Assistant, includes Student Affairs theory, Higher Education Best Practices, Leadership theory, and Critical and Creative thinking. Emphasis on developing community among residence life staff members. Classroom instruction will be supplemented by other training programs such as fall pre-service training, staff meetings, and in-service training. The objective is to provide students with the knowledge and skills to be effective RAs. Prerequisite: Permission of instructor.	**EDU 2200. Introduction to the Teaching of Reading (I, II; 3)** An introductory overview course reviewing current research, approaches, and methodology of teaching reading and literacy processes and skills in today's schools. The course is intended to introduce candidates to: (a) an understanding of the reading process; (b) a knowledge of research-based reading and literacy strategies; (c) competencies and attitudes for teachers of literacy; and (d) acquaintance with materials used in teaching, reading, writing, and spelling. Prerequisite: EDU 2300, EDU 2264, EDU 2262; formal acceptance into a teacher preparation program.	**EDU 2300. Educational Psychology (I, II; 3)** This course addresses systems of learning theory and social development. Candidates are exposed to prominent theorists and research that shape current educational programs. Through this course prospective teachers should understand the interactions of the cognitive, behavioral, and intelligence theories that provide the basis for sound educational planning. Prerequisite: None. Equivalent to TAG OED003.
EDU 2500. Professional Education Seminar (I, II, III; 2) This first seminar in Education is for students who have interest in joining the College of Education for their studies. Topics related to the standards and assessments significant to teaching and becoming a teacher will be addressed. Candidates will be introduced to Ohio and National Expectations for teaching and learning and the assessment process for teacher candidates and their assessment of student learning. Candidates preparing to teach will be introduced to requirements, responsibilities, skills and dispositions involved in becoming successful teacher candidates at Central State University. Prerequisites: Sophomore standing; completion of a minimum of 40 semester hours; successful completion of the General Education writing and math requirement; having passed the PPST or ACT of 21; a GPA of 2.7.	**EDU 2600. Introduction to Teacher Education (I, II, 3)** This course is designed to address aims of education and role of schools in a democratic society. Students will have the opportunity to study economic, legal, and political context of schools in America. Additionally, culturally responsive, and inclusive teaching; legal issues and professional responsibilities of teaching profession will be examined. Successful completion of this course for formal admission into a program in the College of Education.	**EDU 2700. Planning for Instruction (I, II; 3)** This This course provides preservice teachers with a foundation of effective instructional practices and explores various issues and concepts relevant to instructional frameworks in K-12 classrooms. The methodology will include a study of core principles of effective instruction including, but not limited to multimodal instructional delivery, evidence-based instructional materials and practices, aligning instruction to state and national Common Core Standards, assessment strategies to inform instruction, differentiated instruction, technology integration, as well as culturally-responsive teaching strategies.

EDU 3205. Adolescent and Young Adult Literature (I, II; 3) Candidates will critically study and evaluate the genre and its connections to other forms of literature, examine the modes and themes in the literature, discuss and apply theories undergirding the teaching of young adult literature, investigate strategies for encouraging student reading, and consider how young adult literature can be used to promote both life-long reading and critical thinking. The candidates will meet these goals by using young adult literature commonly found in courses in nearby school districts. Pre- requisites: Formal acceptance into the AYA Integrated Language Arts Program.		
EDU 3262: Educational Foundations (I, II; 3) This course is designed for the preprofessional development of historical, philosophical, and sociological perspectives for successful teaching and learning in schools. Students will have the opportunity to experience diverse school, community, and college	**EDU 3263: Classroom Management and Student Discipline (I, II; 3)** This course is designed to teach the various strategies and techniques for managing a classroom. The major emphasis is placed on a preventive problem approach. Consideration is given to identifying inappropriate classroom behavior, and	**EDU 3264: Multicultural Education (I, II; 3)** This course is designed to focus on interrelationships of social forces and education, including an introduction to multicultural and global issues in contemporary society, and their application to the educational process and schooling. This course provides
laboratory settings, and to explore the various options in classroom teaching to help them determine whether teaching is the appropriate field for them. Successful completion of this course is required for formal admission into a program in the College of Education.	on selecting and applying appropriate techniques for modifying inappropriate behavior. Candidates will investigate various classroom management models and research. In addition, attention is given to designing the learning environment to maximize teaching effectiveness. Candidates are required to spend 20 clock hours observing in pre-K-12 classrooms. Guidelines will be provided describing the activities to complete during the field observation. Students are responsible for the cost and submission of clear BCII and FBI background checks.	strategies for supporting the needs of diverse populations in the classroom. Successful completion of this course is required for formal admission to a program in the College of Education. Twenty (20) clock hours in field placements is required in which students will connect the day-to-day classroom environment to the concepts they are learning in this course. Guidelines will be provided describing the activities to complete during the field experience. Students are responsible for their own transportation to field sites. Prerequisites: Clear BCII and FBI background check.

EDU 3265. Educational Technology (I, II; 3) This course provides students with the definition of Educational Technology and discusses the importance of educational technology in the Information Age by examining the future of teaching and learning as it relates to Information Age trends. These include constructivism and student-centered learning, constructionism, project-based learning, and higher-order learning. Explanations to the concepts of affordances, digital natives, web 2.0 and learning 2.0 will be covered. 21st century skills and the ISTE national educational technology standards will be discussed so when choosing a learning method, the ISTE national educational technology standards will be met. Students will learn the use of managing a wiki for student-centered learning, how to create and configure a class blog and how to create a website. Google Drive applications will be discussed to support student centered learning. Explanations on how using different technologies can support location-based learning, including global positioning systems, augmented reality, and mapping tools. Students will learn about selecting appropriate technological tools and applications for a project. Quality of resourced based learning activities will be embraced including the key practices needed to determine the accuracy of an information source. The children's Internet protection act and its effect on schools will be clarified. Components of the interactive whiteboard systems and how to choose activities that support higher-order learning will be elucidated. The key concepts related to distance learning will be explained and the major reasons that educational institutions provide distance learning and how to identify the learning tools needed for synchronous distance learning.	**EDU 3266: Individuals with Special Needs: Inclusion and Collaboration (I, II; 3)** This course provides an overview of the characteristics of children for whom educational modifications are necessary in the general education classroom. Exceptional children include individuals with intellectual disabilities, the intellectually gifted, children with auditory handicaps, visual handicaps, and children with specific learning and behavioral disabilities. Candidates will be introduced to models of 204 differentiated instruction and various types of assistive technology to help all children learn. Students are required to spend 20 clock hours observing in PreK-12 classrooms. Guidelines will be provided describing the activities to complete during the field observation. Students are responsible for providing their own transportation to placement site.	**EDU 3300. Language Arts Methods for Pk-5** (I, II; 3) This course provides experience in using developmentally appropriate curriculum, materials strategies, and pedagogy in Language Arts teaching for the Pre-k-5 teacher candidate. The methodology will include integrated curriculum, developmentally appropriate materials, the integration of children's literature and trade books, exposure to and analysis of a variety of commercial Language Arts textbooks, and strategies for meeting Common Core Language Arts Standards. Candidates will also utilize their skills in assessing student learning as a result of their teaching and engage in planning for next steps based on assessment results. Twenty-five hours of teaching in a PreK-5 classroom is required. Students will need to secure a background check before teaching in the PreK-5 classroom. Prerequisites: Complete all General Education courses with a grade of "C" or better in each course, complete EDU 2200, EDU 3310, EDU 3315, and EDU 3320 with a grade of "C" or better, a cum GPA of 3.0, Clear BCI and FBI background checks, and formal admittance into the EDP Teacher Preparation Program.

EDU 3310. Language and Literacy/Microteaching (I, II; 3) This course focuses on the language development and literacy growth of young children, ages birth through		

eight years. Strategies for planning, teaching, and assessing a high quality, early childhood language arts program will be emphasized. The course includes an opportunity for students to engage in microteaching experiences requiring them to plan and practice teaching in diverse settings as a way to develop their teaching proficiencies. Prerequisites: EDU 2200, EDU 3262, EDU 3264, EDU 3266; formal acceptance into a teacher preparation program.		
EDU 3315. Teaching Reading Through Children's Literature/Microteaching (I, II; 3) This course looks at the current knowledge base of the reading process as it influences the use of children's literature for reading instruction in early and middle childhood. Particular emphasis is placed on teaching to elicit personal response, reading for different purposes, appreciation of a range of culturally responsive literature. The course examines the reading curriculum for early and middle grades, particularly the Ohio Common Core Content Standards for English Language Arts. It includes an opportunity for students to engage in microteaching experiences requiring them to plan and practice-teach in diverse settings as a way to develop their teaching proficiencies. Prerequisites: EDU 2200, EDU 3262, EDU 3264,EDU 3266; formal acceptance into a teacher preparation program.	**EDU 3320. Phonics and Reading/Microteaching (I, II; 3)** This course focuses on the research and knowledge concerning phonemic awareness, phonics, and fluency and their relationship to skill development in reading. It focuses on learning to identify words by using specific skills and on understanding the challenges of using the skills in learning to read. The course includes an opportunity for students to engage in microteaching experiences requiring them to plan and practice-teach in diverse settings as a way to develop their teaching proficiencies. Prerequisite: Must be formally admitted to a teacher preparation program.	**EDU 3325. Assessment and Measurement (I, II; 3)** This course focuses on developing the skills necessary to become effective assessors of student learning, with emphasis on identifying instructional objectives and using the evaluation results to modifying the content, pace, format, and style of delivery. Covered in this course will be fundamentals of varied classroom assessments, such as pre-tests, formative and summative tests, authentic assessments and concepts of standardized testing. Candidates will develop assessments and analyze how assessment data is used to improve instruction and learning. Pre-requisite: formal acceptance into a teacher preparation program.

EDU 3330. Teaching Reading in the Content Areas/ Microteaching (I; 3) An introduction to the range of strategies and programs for teaching the reading process in the content area, including the nature of the reading process, assessment techniques and instructional strategies to increase comprehension. The use of trade books and informational books in microteaching experiences requiring candidates to plan and practice-teach in diverse settings as a way to develop their teaching proficiencies. Specific course assignments and microteaching experiences are tailored to the student's licensure areas. Pre-requisite: formal admittance into a teacher preparation program.	**EDU 3335. Mathematics Methods for Pk-5/Field (I, II; 3)** This course provides experience in using developmentally appropriate curriculum, materials, strategies, and pedagogy in Mathematics teaching for the Primary Teacher candidates. The methodology will include integrated curriculum, developmentally appropriate, hands-on experiences in mathematics, exposure to and analysis of a variety of commercial math teaching programs, and strategies for meeting Common Core Math standards. Candidates will also utilize their skills in assessing student learning as a result of their teaching and engage in planning for next steps based on assessment results. Twenty-five hours of teaching in a PreK-5 classroom is required. Students will need to secure a background check before teaching in the PreK-5 classroom. Prerequisites: Complete all General Education courses with a grade of "C" or better in each course, a cum GPA of 3.0, Clear BCI and FBI background checks, and formal admittance into the ECE Teacher Preparation Program.	**EDU 3336. Science Methods for Pk-5/Field (I, II; 3)** This course provides experience in using developmentally appropriate curriculum, materials, strategies, and pedagogy in science teaching for the Primary teacher candidate. The methodology will include integrated curriculum, hands-on, experiential learning including interactions with the natural world, learning about appropriate science pedagogy including hands-on & 5-E learning, developing safety plans for laboratory and chemical storage, and conducting science research to meet Ohio Science Standards. Candidates will also utilize their skills in assessing student learning as a result of their teaching and engage in planning for next steps based on assessment results. Twenty-five hours of teaching in a PreK-5 classroom is required. Students will need to secure a background check before teaching in the PreK-5 classroom. Prerequisites: Complete all General Education courses with a grade of "C" or better in each course, complete EDU 2200, EDU 3310, EDU 3315, and EDU 3320 with a grade of "C" or better, a cum GPA of 3.0, Clear BCI and FBI background checks, and formal admittance into the EDP Teacher Preparation Program.

EDU 3340. Special Education Law (I, II; 3) Special Education Law focuses on the study of court cases, state-level legislation and related historical events that preceded the passage of the Individuals with Disabilities in Education Act (IDEA) and Every Student Succeeds Acts (ESSA). This course covers definitions, procedural requirements and legal safeguards of IDEA of IDEA and ESSA and is essential in the preparation of INS candidates to be successful on the Ohio Assessment for Educators (OAE). Emphasis will be placed on how the ODE is meeting and exceeding federal requirements. Pre-requisites: EDU 2262, EDU 2264 and EDU 2266 and formal acceptance into a teacher preparation program.	**EDU 3341. Survey of Exceptional Students/Mild Moderate (I, II; 3)** This course 205 provides background in the foundations and theories, etiology, diagnosis, and individual learning differences of individuals with mild to moderate disabilities. Prerequisites: EDU 2262, EDU2264, and EDU2266 and formal acceptance into a teacher preparation program.	
EDU 3361. Middle Level and AYA Language Arts Methods/Field Experience (I, II; 3) This course will provide teacher candidates of Middle Level and Adolescent youth with various teaching and assessment strategies and	**EDU 3362. Middle Level and Adolescent Mathematics Methods/Field Experience (I, II; 3)** This course will provide teacher candidate of Middle Level and Adolescent youth with various teaching and assessment strategies and models	**EDU 3371. Middle Level and Adolescent Social Studies Methods/Field Experience (I, II; 3)** This course will provide teacher candidates of Middle Level and Adolescent youth with various teaching and assessment strategies and models

models which provide language arts concepts and skills learning necessary for students to both understand and apply language arts concepts and skills in various contexts. The course will include a field dimension of at least 60 hours in which candidates will be assigned to work with a field teacher in an appropriate setting. During this time, candidates will gain greater command of their abilities to plan, implement and evaluate student learning in language arts, manage the classroom and differentiate their instruction to meet individual student learning needs. Evaluation of candidate performance will be a collaborative effort between the university instructor and the field teacher using established assessment instruments. Candidates will be required to have state-required FBI and BCII Background checks before teaching in grades 4 through 9 and 7 through 12 classrooms. It is the student's responsibility to secure the appropriate background checks. Prerequisites: Formal acceptance into a teacher preparation program. Approval of Program Advisor.	which provides mathematics concepts and skill learning necessary for students to both understand and apply mathematics concepts and skills in various contexts. The course will include a field dimension of at least 60 hours in which candidates will be assigned to work with a field teacher in an appropriate setting. During this time, candidates will gain greater command of their abilities to plan, implement and evaluate students in mathematics, manage the classroom and differentiate their instruction to meet individual student learning needs. Evaluation of candidate performance will be a collaborative effort by the university instructor and the field teacher using established assessment instruments. Candidates will be required to acquire state-required FBI and BCII Background checks before teaching in grades 4 through 9 and 7 through 12 classrooms. Financial outlay required to pay for background checks. Prerequisite: Approval of Program Advisor.	which provides social studies concepts and skill learning necessary for students to both understand and apply social studies concepts and skills in various contexts. The course will include a field dimension of at least 60 hours in which candidates will be assigned to a field teacher in an appropriate setting. During this time, candidates will gain greater command of their abilities to plan, implement and evaluate students in social studies, manage the classroom and differentiate their instruction to meet individual student learning needs. Evaluation of candidate performance will be a collaborative effort between the university instructor and the field teacher using established assessment instruments. Candidates will be required to acquire state-required FBI and BCII background checks before teaching in grades 4 through 9 and 7 through 12 classrooms. Financial outlay required to pay for background checks. Prerequisite: Approval of Content advisor.
EDU 3372. Middle Level and Adolescent Science Methods/Field Experience (I, II; 3). This course will provide teacher candidates of Middle Level and Adolescent youth with various teaching and assessment strategies and models, which provide science concepts and skill learning necessary for students to both understand and apply science concepts and skills in various contexts. The course will include a field dimension of at least 60 hours in which candidates will be assigned to work with a field teacher in an appropriate setting. During this time, candidates can differentiate their instruction to meet individual student learning needs. Evaluation of candidate performance will be collaborative effort between the university instructor and the field teacher using established 206 assessment instruments. Candidates will be required to acquire state-required FBI and BCII Background checks before teaching in grades 4 through 9 and 7 through 12 classrooms. Financial outlay to pay for the background checks.	**EDU 3851. Intervention Specialist Capstone (I, II; 4)** This course is designed to improve content knowledge, skills and assessment strategies for candidates preparing to be Intervention Specialist teachers of students in grades K-12. The program is aligned with the Special Program Area Standards, Ohio Teaching Standards and the elements of the OAE Content and Professional Knowledge assessments. Students learn self-direction in mastering content concepts, skills and pedagogy to prepare for teaching as an Intervention Specialist and completion of the Teacher Work Sample (TWS). Prerequisites: All courses in the candidate's program, including general education, professional education, and content courses, must be completed before registering for this course, cum GPA 2.75 or above, approval of Director of Field and Clinical Experience, Intervention Specialist Program Coordinator and Department Chair; corequisite: EDU 4491. Candidates must register for this seminar one semester before the course begins, i.e., Register in	**EDU 3861. Language Arts Content Capstone (I, II; 4)** This course is designed to improve content knowledge, skills and assessment strategies for better comprehension of Language Arts Content for middle and AYA programs as aligned with Special Program Area Standards, Ohio Teaching Standards and Ohio Common Core Language Arts Content Standards. Candidates learn self-direction in mastering Language Arts content concepts, skills and pedagogy to prepare for teaching and completion of the Teacher Work Sample (TWS). Prerequisites: All courses in the candidate's program, including general education, professional education, and content courses, must be completed before registering for this course, cum GPA 2.75 or above, approval of Director of Field and Clinical Experience, Language Arts Program Coordinator and Department Chair; co-requisite: EDU 4491. Candidate must register for this seminar one semester before the course begins, i.e., Register in spring for fall class;

		Register in fall for spring class.

Prerequisites: Approval of Program Advisor.	spring for fall class; Register in fall for spring class.	

EDU 3862. Mathematics Content Capstone (I, II; 4) This course is designed to improve content knowledge, skills and assessment strategies for better comprehension of Mathematics content for middle and AYA programs, as aligned with Special Program Area Standards, Ohio Teaching Standards and Ohio Common Core Mathematics Content Standards. Candidates learn self-direction in mastering Mathematics content concepts, skills and pedagogy to prepare for teaching and completion of the Teacher Work Sample (TWS). Prerequisites: All courses in the candidate's program, including general education, professional education, and content courses, must be completed before registering for this course, cum GPA 2.75 or above, approval of Director of Field and Clinical Experience, Mathematics Program Coordinator and Department Chair; co-requisite: EDU 4491. Candidate must register for this seminar one semester before the course begins, i.e. Register in spring for fall class; Register in fall for spring class.	**EDU 3871. Social Studies Content Capstone (I, II; 4)** This is a course to improve content knowledge, skills and assessment strategies for better comprehension of Social Studies content and to improve skills and assessment strategies for middle and AYA programs as aligned with the Special Program Area Standards, Ohio Teaching Standards and Ohio Content Standards for the Social Studies. Candidates learn self-direction in mastering Social Studies content concepts, skills and pedagogy to prepare for teaching and completion of the Teacher Work Sample (TWS). Prerequisites: All courses in the candidate's program, including general education, professional education, and content courses, must be completed before registering for this course, cum GPA 2.75 or above, approval of Director of Field and Clinical Experience, Social Studies Program Coordinator and Department Chair; co-requisite: EDU 4491. Candidate must register for this seminar one semester before the course begins, i.e. Register in spring for fall class; Register in fall for spring class.	**EDU 3872. Science Content Capstone (I, II; 4)** This is a course to improve content knowledge, skills and assessment and to improve skills and assessment strategies for better comprehension of Science 207 content for middle and AYA programs as aligned with Special Program Area Standards, Ohio Teaching Standards and Ohio Science Content Standards. Candidates learn self-direction in mastering science content concepts, skills and pedagogy to prepare for teaching and completion of the Teacher Work sample (TWS). Prerequisites: All courses in the candidate's program, including general education, professional education, and content courses, must be completed before registering for this course, cum GPA 2.75 or above, approval of Director of Field and Clinical Experience, Science Program Coordinator and Department Chair; co-requisite: EDU 4491. Candidate must register for this seminar one semester before the course begins, i.e., Register in spring for fall class; Register in fall for spring class.
EDU 4491. Student Teaching (I, II; 9) A semester of practical teaching experience at the relevant early childhood, middle level, adolescent to young adult and K12 levels in public or private schools located in rural, urban, and suburban settings. The candidate is under supervision of the field supervisor in a classroom appropriate for the teacher candidate's preparation, and periodic supervision of the University Supervisor, who has experience and education in the candidate's preparation. It is expected that the candidate will successfully exhibit the appropriate skills in lesson planning, lesson preparation, assessment, and classroom management expected of a novice teacher. Course grade type is Satisfactory (S, pass) or Unsatisfactory (U, fail). Corequisite: EDU 3000 class series. Candidate must register for this course one semester before the course begins, i.e., register in the Spring for Fall class; register in the Fall for Spring class.	**EDU 4895. Capstone Seminar (I, II; 3)** This culminating professional education course focuses on the requisite professional knowledge, skills and dispositions required of teacher candidates completing the Central State University, College of Education Teacher Preparation Programs. The seminar focuses on the cumulative pre-professional development of relevant knowledge bases, performance skills and dispositions as aligned with the College of Education's Conceptual Framework (CF), the Special Program Areas (SPA's), the Ohio Standards for the Teaching Profession (OSTP), the Ohio Assessment for Educators (OAE) I Content and the Professional Education Examinations. Candidates learn self- direction in mastering specific content in licensure area, skills and pedagogy to prepare for teaching and completion of the Teacher Work Sample (TWS). Prerequisites: All courses in the candidate's program, including general education, professional	

Prerequisite: All courses in the candidate's program, professional education and general education must be completed before registering for student teaching, GPA 2.75 or above, clear FBI and BCI background check, passing scores for Ohio Assessment for Educators: Content, Professional Knowledge, and Foundations of Reading (ECE, MCE, and INS). Approval from Director of Field and Clinical Experience Program Coordinator and Department Chair. Students are responsible for the cost of the FBI and BCI background checks	education, and content courses, must be completed before registering for this course, cum GPA 2.75 or above, approval of Director of Field and Clinical Experience, Science Program Coordinator and Department Chair; co-requisite: EDU 4491. Candidate must register for this seminar one semester before the course begins, i.e., Register in spring for fall class; Register in fall for spring class.	

ENGLISH

ENG 1100. Introduction to Writing and Reading for College (I, II, III; 5) An intensive introduction to writing and reading for college. Students will read literary and nonliterary texts and compose essays that demonstrate proficiency in college-level writing and mechanics. At least one paper will be a reader-response essay based on a literary text. Students will also be introduced to the basic principles of documentation and write one essay using documentation. Lecture/discussion periods will focus on assigned readings and the conventions of academic prose, including elements of Standard English grammar and mechanics. Individualized and small group work on the writing process is included.	**ENG 1101. Introduction to Writing for College (I, II, III; 4)** Informative writing based on literary and non-literary texts. Students will compose essays that demonstrate proficiency in mechanics. At least one paper will be a reader-response essay based on a literary text. Students will also be introduced to the basic principles of documentation and write one 208 essay using documentation. Individualized and small group work on the writing process included.	**ENG 1102. Writing and Researching the Essay (I, II; 4)** Research-based analytic and argumentative writing using library and Internet sources. Students will continue to develop proficiency in college-level writing and mechanics. Students will write brief essays and at least one longer research paper using both print and electronic sources. The research paper will be oriented toward the student's major field or area of interest. Prerequisite: Grade of C or above in ENG 1100 or ENG 1101 or equivalent.
ENG 2020. Vocabulary Development and Applications (I, II, and on-demand; 2) This is the first of three linguistics courses. It traces the growth and structure of English vocabulary, from its beginnings to contemporary American usage, and from the Anglo-Saxon and Nordic base to the contributions of Classical Latin and Greek, medieval French, and modern European, Asian, and African languages. Topics include affixes and roots; patterns of word formation, pronunciation, and semantic change; and standard and nonstandard usage, with discussions of jargon, slang, and colloquialisms. Other considerations include neologisms, idioms, abbreviations, and names. For expansion	**ENG 2100. Great Books, Great Films (I; 3)** A writing intensive course focusing on the study of significant literary works and their film adaptations. Students will investigate the relationship between literary texts and film adaptations and learn how to read, view, discuss, and write about literature, film, and their intersections. Prerequisite: ENG 1102	**ENG 2101. Literature and the Global Village (I; 3)** A writing intensive course focusing on issues of globalization and culture as expressed through literature. Includes texts from a range of periods and cultures. Prerequisite: ENG 1102.

and refinement of one's vocabulary. Recommended for preprofessional majors. Not for General Education. Prerequisite: ENG 1100 or ENG 1101 or equivalent.		
ENG 2102. Literature and Our Times (II; 3) A writing intensive course focusing on literature from a range of periods and cultures as it relates to contemporary social and political issues. Prerequisite: ENG 1102.	**ENG 2103. The Literary Tradition (II; 3)** A writing intensive course focusing on major authors and master works of literature written in English; for example, Chaucer, Shakespeare, Wordsworth, Dickens, Poe, Twain, Morrison, Wright. Prerequisite: ENG 1102.	**ENG 2115. Literature and Gender (I; 3)** A writing intensive course focusing on the status, roles, and related experiences of men and women as expressed through literature. Examines ideas of masculinity and femininity during different historical periods and from various cultural perspectives. Prerequisite: ENG 1102.
ENG 2200. Introduction to Literary Studies (I II, III; 3) An appreciation of literature through a variety of critical perspectives. Includes the study of literary types, forms, and techniques using historical and modern literary examples. Students meet the literature faculty, discuss career choices for English majors, and preview the required and elective courses in the major.	**ENG/ILC 2290. Foreign Literature in Translation (On demand; 3)** A reading and discussion course for nonmajors designed to acquaint the student with selected major works by foreign language authors in translation. Emphasis on European, Latin American, and Francophone African writers. Content may change each time offered. May be repeated for credit when content changes.	**ENG/ILC 2293. Hispanic American Literature in Translation (On demand; 3)** An introductory reading and discussion course to acquaint students with foundational overview of Hispanic America from her encounter with Europe until her independence from Spain through selected major works by Hispanic American authors in English translation. Works to be studied are written or set in colonial and postcolonial periods in Hispanic America. The course will give students the opportunity to study the selected works and to analyze and interpret them in their socio-cultural, historical, and political contexts. Prerequisite: None; Gen. Ed course.
ENG/ILC 2294. Francophone African Literature in Translation (On demand; 3) An introductory reading and discussion course to acquaint students with selected major works by Francophone African 209 authors in English translation. Works to be studied are written or set in pre-colonial, and postcolonial periods in Francophone Africa. The course will give students the opportunity to study the selected works and to analyze and interpret them in their socio-cultural, historical, and political contexts. Prerequisite: None; Gen Ed course.	**ENG/ILC 2295. The African Storyteller (On demand; 3)** An introductory course on traditional storytelling in Africa. African storytellers do not merely narrate stories; there is performance. The course will examine the art of the African storyteller including image, narrative technique, rhythm, and symbolism. African storytelling from oral to written form will also be discussed. Students will have the opportunity to study performance and aesthetics of African oral narratives and interpret them within their socio-cultural relevance. Prerequisite: None; Gen Ed course.	**ENG 2300. Introduction to Creative Writing (On demand; 4)** Introduction to the study and practice of various forms of creative writing. Students will read and write a variety of published stories, essays, poems, or drama in terms of craft and learn how to apply the techniques of other writers to their writing. Students who successfully complete this course will have a working knowledge of creative writing and should be better prepared to go on to intermediate and advanced levels in the genre of their choice. Prerequisite: ENG 1100 or 1101.
ENG 2310. Creative Nonfiction Workshop (On demand; 3) Intermediate and continuing practice and proficiency in creative writing with a focus on the art of nonfiction. This course offers students further exposure to the most recent techniques, conventions, and narrative strategies of today's creative nonfiction writing across various nonfiction markets. Students generate original	**ENG 2320. Poetry Workshop (On demand; 3)** Intermediate and continuing practice and proficiency in creative writing with a focus on the art of poetry. This course offers students further exposure to the most recent techniques, conventions, and narrative strategies of today's poetry writing across various markets. Students generate original works and receive feedback through the	**ENG 2330. Fiction Workshop (On demand; 3)** Intermediate and continuing practice and proficiency in creative writing with a focus on the art of fiction. This course offers students further exposure to the most recent techniques, conventions, and narrative strategies of today's fiction writing across various fiction markets. Students generate original works and receive feedback

works and receive feedback through the workshop process for revision. Students collect and compose revised work for submission at semester's end. Prerequisite: ENG 1100 or 1101 and ENG 2300.	workshop process for revision. Students collect and compose revised work for submission at semester's end. Prerequisite: ENG 1100 or 1101 and ENG 2300.	through the workshop process for revision. Students collect and compose revised work for submission at semester's end. Prerequisite: ENG 1100 or 1101 and ENG 2300.
ENG 2400. Introduction to Rhetoric (I, II; 4) Students will begin to learn the foundational concepts and theories of rhetoric (defined by the department as the art communication, persuasion, and argumentation). Students will engage with literary and rhetorical texts in order to make connections between those texts and their mutual influences on one another. Students will further use their knowledge to practice the concepts and theories as they apply to potential professional and/or career Writing. In this writing intensive class, students will compose using various modes. Prerequisite: ENG 1100 or ENG 1101.	**ENG 2500. Literature by Black Women (I, II; 3)** A writing intensive course focusing on the status, roles, and experiences of Black women as expressed in their writing. Examines ideas of race and gender during different historical periods and from various cultural perspectives. Literature may focus on one or several sites across the Diaspora including the United States, the Caribbean, and/or Africa. Prerequisite: ENG 1102.	**ENG 2600. Comics and Graphic Novels (I, II, On Demand; 3)** Introduction to the history, forms, and reading practices of graphic storytelling through critical reading of, and writing about, comics and graphic novels. Pre-requisite: ENG 1102 or equivalent.
ENG 2700. Eco Literature (I, II, On Demand; 3) This course explores various elements of environmentalism through its relationship with Literature. Through novels, essays, poetry, and film, Eco-Lit will analyze past and current concepts such as climate change, loss of habitat, anthropocentrism, and environmental justice/aide. Prerequisite: ENG 1102.	**ENG 3000. Advanced Composition (I, II, III; 2)** Students will read, analyze, and write informative and persuasive essays, with a focus on voice, purpose, and style. Analysis of the effective use of evidence in the construction of arguments and review of the use of documentation. Includes instruction in the preparation of resumes and professional letters. Prerequisite ENG 1102 or equivalent.	**ENG 3001. Technical Writing (Odd years - II; 3)** Fundamental principles and skills used in scientific and technical writing and research. Prerequisite ENG 1102.
ENG 3006. Creative Writing: Poetry and Short Story (II; 3) Directed experience in the writing of poetry and short stories. Includes practice in traditional and contemporary concepts of form, reading and discussion of a wide range of 210 traditional and modern texts, and presentation and discussion of student's creative works. Prerequisite: ENG 1102.	**ENG/ILC 3010. African Literature (II; 4)** Studies of texts written in English and English translations of texts written by the descendants of peoples indigenous to the African continent. May include oral literature, essays, poetry, fiction, and drama. Prerequisite: ENG 2200 or instructor permission.	**ENG 3020. African American Literature I (I; 3)** Studies of significant African American writers from 1746 to 1912. Prerequisite: ENG 2200 or instructor permission.
ENG 3021. African American Literature II (II; 3) Studies of significant African American writers from 1913 to the present. Prerequisite: ENG 2200 or instructor permission.	**ENG 3030. American Literature I (I; 3)** Studies of significant American texts from the colonial period to 1860. Prerequisite: ENG 2200 or instructor permission. Equivalent to TAG OAH053.	**ENG 3031. American Literature II (II; 3)** Studies of significant American texts from 1860 to the present. Prerequisite: ENG 2200 or instructor permission.

ENG 3040. British Literature I (I; 3) Studies of significant British texts from Beowulf through 1789. Prerequisite: ENG 2200 or instructor permission.	**ENG 3041. British Literature II (II; 3)** Studies of significant British texts from 1789 to the present. Prerequisite: ENG 2200 or instructor permission.	**ENG 3051. World Literature I (I; 3)** The study of representative world literatures from the classical eras to 1900 (excluding African, American, and British literature). The texts are in English. Prerequisite: ENG 1102.
ENG 3052. World Literature II (II; 3) Studies of representative world literatures (excluding African, American, and British works) from 1900 to the present. The texts are in English. Prerequisite: ENG 1102.	**ENG 3060. Literature by Women (II; 3)** Studies of significant texts by women, written in English. Focuses on the literary techniques and concerns of women within diverse cultural traditions. Prerequisite: ENG 2200 or instructor permission.	**ENG 3100. Literary Criticism: Theory and Practice (I; 3)** A study of theoretical, practical, and historical approaches to literary study from Plato to the present. Focuses on understanding the major critical questions and approaches. Required of all English majors. Prerequisites: ENG 2200 and at least one 3000-level literature course.
ENG 3200. History of the English Language (I; 3) Chronological study of the vocabulary, pronunciation, and syntax of the major varieties of English, primarily British and American. Practice in using the International Phonetic Alphabet. Prerequisite: ENG 1102.	**ENG 3540. Creative Writing: Prose (I; 3)** An advanced level of directed experience in the writing of both fiction and creative nonfiction. Includes reading and discussion of works in both genres, the development of a student prose portfolio, workshop discussion of each student's creative work, and the final presentation of a developed story or essay of the student's own choosing. Prerequisite: ENG 3006.	**ENG 3550. Creative Writing: Poetry and Performance (II; 3)** An advanced level of directed experience in the writing of poetry to include presentation and performance. Includes reading and discussion of contemporary book-length poetry collections, the development of a student poetry portfolio, workshop discussion of each student's creative work, study and practice of presentation/performance skills, and the final presentation/performance of the student's collection. Prerequisite: ENG 3006.
ENG 4000. Topics in Literature (Even years - II; 3) Concentrates on a single issue, genre, cultural group, or author. Focus varies with each course offered. May be repeated once for credit. Prerequisite: ENG 3100 or instructor permission.	**ENG 4015. Advanced Research Writing (I, II, and on-demand; 3)** This course addresses upper-division and post-graduate writing needs. Analytical formats of inquiry, e.g., for abstracts, reviews, critiques, the scientific hypothesis paper, and for advanced writing needs in the various disciplines, including those of capstone and honors courses. Examines presentation styles, e.g., MLA, APA, Chicago, CBE and CSE. 211 Prerequisite: Enrollment is by permission of the instructor only.	**ENG 4020. Special Topics: Creative Writing (On demand; 3)** Concentrates on a single issue, genre, cultural group, or author. Focus varies with each course offered. May be repeated once for credit. Prerequisite: Any 3000-level creative writing workshop or minimum Sophomore standing with the course instructor permission.
ENG 4050. Forms and Genres: The Novel (Odd years - I; 3) Focused study of the novel as a literary genre. Traces the development of the novel as an art form and examines the range of its conventions using historic and contemporary models with particular emphasis on American and British authors. Prerequisite: ENG 3100 or instructor permission.	**ENG 4060. Forms and Genres: Poetry (Odd years - II; 3)** Focused study of poetry as a literary genre. Traces the developments of poetry as an art form and examine the range of its conventions using historic and contemporary models with particular emphasis on American and British authors. Prerequisite: ENG 3100 or instructor permission.	**ENG 4070. Forms and Genres: Drama (Even years - I; 3)** Focused study of drama as a literary genre. Traces its developments as an art form and examines the range of its conventions using historic and contemporary models with particular emphasis on American and British authors. Prerequisite: ENG 3100 or instructor permission.

ENG 4080. Shakespeare and His Influence (II and on demand; 3) Focused study of Shakespeare's work, life, times, and enduring influence with an emphasis on his major plays. Prerequisite: ENG 3100 or instructor permission.	**ENG 4090. American Literary History (Even years - II; 3)** Focused study on the works of a major author or up to three major writers within a literary moment form American literature (e.g. the Harlem Renaissance). The course study may vary with each offering. Intensive engagement with a literary figure or select figures will be used as a lens to examine literary historical and cultural issues. Prerequisite: ENG 3100 or instructor permission	**ENG 4092. British Literary History (Odd years - II; 3)** Focused study on the works of a major author or up to three major authors within a literary moment from British literature (e.g. Chaucer or Jane Austen or Middleton and Ford within Renaissance Tragedy). The course study may vary with each offering. Intensive engagement with a literary figure or select figures will be used as a lens to examine literary historical and cultural issues. Prerequisite: ENG 3100 or instructor permission.
ENG 4196. Internship or Practicum (On Demand; 1-4) An internship is usually an off-campus activity while the practicum is an on-campus activity with a more limited objective (or task orientation). Generally, internships carry 2-4 semester hours. The practicum may be carried out from 1-4 semester hours and may be supervised by the student's	**ENG 4197. Individual Study (On Demand; 1-4)** An individual study is a research project or course of study, not a performance activity and not otherwise offered as an existing course. Individual study may be carried out from 1-4 semester hours and may be supervised by the student's departmental advisor. Before the end of the previous semester	**ENG 4200. Linguistics and American Grammar (II; 4)** Covers topics such as the language brain; language acquisition; phonology, morphology, syntax, and semantics; and the varieties of American English. The contributions of psycho-and sociolinguistics and approaches to modern grammar instruction are emphasized. Includes spelling strategies
departmental advisor. Prerequisites: ENG 2200 and departmental permission.	and in consultation with the departmental advisor, the student must submit a proposal to the Department chair. Prerequisites: ENG of all English majors. Pre/co-requisite for 3000-4000 level literature courses. Prerequisite: ENG 1102.	and composition theory for classroom teachers and practice in the International Phonetic Alphabet. Prerequisite: ENG 1102.
ENG4895. Senior Capstone Seminar (I, II; 4) A retrospective of courses in the major and preparation for the field test in English and American Literature for the English majors and for the Language Arts majors in Professional Education. The fall semester is for the Education majors emphasizing content, methods, and materials, and the preparation for the Praxis II Exam for Ohio licensure. The spring semester if for English majors emphasizing career outlook and preparation for their field test. Prerequisite: senior standing, majors only.		

ENTREPRENEURSHIP

ENT 3135. Entrepreneurship Management (I; 3) This course exposes students to key management and information systems principles, and techniques essential for entrepreneurship. This course focuses on identifying and evaluating entrepreneurial 212 opportunities and the student's potential for contributing new business ventures. Central to the course is a "learning by doing" approach.	**ENT 3355. Comparative Entrepreneurship Enterprise (II; 3)** This course introduces students to a comparative analysis of various types of entrepreneurial enterprises including for-profit and not-for profit enterprises. This course will expose students to entrepreneurship opportunities in diverse fields such as the arts, literature and social enterprises. Differences and similarities between these enterprises will be considered. Prerequisite: ENT 3135.	**ENT 3505. Entrepreneurship & New Ventures (I; 3)** This course concentrates on starting and growing new businesses. By investigating various ways to create and grow entrepreneurial projects, the course explores innovation across a wide range of scenarios. This course examines the process by which the entrepreneur conceives, develops, and manages new ventures. Prerequisite: ENT 3135.
ENT 4460. Social Enterprise Management (II; 3) This course is about the opportunities and challenges of using managerial skills and entrepreneurial talents creatively and appropriately to help solve social problems and to make a positive difference in the lives of others. Focus is on organizations with an explicit civic mission or social purpose, from well-known nonprofits like Habitat for Humanity, National Foundation for Teaching Entrepreneurship and City Year to widely regard for profits. Course materials include readings, cases and films (where relevant). Prerequisite: ENT 3135.	**ENT 4570. Entrepreneur Financing (I; 3)** This course covers various aspects of financing an entrepreneurial venture. Major topics include attracting seed and growth capital from sources such as venture capital, investment banking, government, and commercial banks. Among the issues discussed are valuing a company, going public, selling out, acquisitions, bankruptcy, different legal forms of organization, partnerships, and taxes. Prerequisite: ENT 3135.	**ENT 4895. Entrepreneur Capstone Course (II; 3)** This course is to explore the interfaces between management, strategy finance, and entrepreneurship in the context of 1) independent ventures, 2) non-profit ventures and 3) large firms. The goal of this course is to develop – in each student – a mastery of the skills and competencies that facilitate opportunity recognition, innovation, and creation in the face of a dynamic and uncertain marketplace. Students will be challenged to develop a business along the idea path: idea; opportunity; competition research and advantage; market and strategic analysis; financial pro forms;

		growth and exit. Students will be challenged to act boldly, and to break with conventional thinking when it comes to the realities of the marketplace and their own ideas. Prerequisite: ENT 3135.

ENVIRONMENTAL ENGINEERING

ENE 2200. Introduction to Environmental Engineering (I; 3) An introductory course that gives students some basic understanding of stoichiometry, chemical equilibrium, mass balances and kinetics (chemical and biological) in continuous and batch unit operations pertaining to environmental systems. Characterization of pollution in open systems such as streams, lakes and soil will be covered. Applications include drinking water, wastewater, municipal and industrial landfills, and hazardous waste operations. Site characteristics, risk analysis and assessment, toxicology, and site remediation will be briefly addressed. Students will work on generating an environmental impact statement for a construction project. Prerequisites: CHM 1201, MTH 2503.	**ENE 3305. Fluid Mechanics and Hydraulics (I; 3)** First course that deals with statics and dynamics of incompressible fluids in general, and water in particular. Fluid properties; Principles of hydrostatics; Kinematics and dynamics of fluid flows; Flow visualization; Mass, momentum, and energy conservation; Bernoulli's principle; Introduction to fluid flow in closed conduits and open channels; Introduction to turbomachinery - pumps and turbines. Laboratory work includes demonstration of Bernoulli's principle and Reynold's laminar and turbulent flow concepts; estimating pipe friction; energy principles in open channel flow and steady flow formulas - Chezy and Manning's formulas; Hydraulic behavior of turbo machinery. Additional two contact hours are required for laboratory experiments. Three one-hour lectures/one two-hour lab. Prerequisites: MTH 2503 and PHY 2411. Equivalent to OET009	**ENE 3309. Water Chemistry (I; 3)** This is an applied course in chemistry dealing with chemical reactions in water. Chemical equilibrium speciation studies - Aqueous speciation, Precipitation-Dissolution, Oxidation Reduction in both natural and impaired aqueous environments. Rate laws and kinetics of aquatic reactions of environmental importance – Hardness Removal, Acid mine drainage, Disinfection. Laboratory experiments include estimation of total metals using atomic absorption spectrometer, organics using HPLC and Gas chromatograph/Mass spectrometer using EPA approved methods. Estimation of pH, dissolved oxygen, and conductivity. Colorimetric methods for estimation of chloride, nitrite, and nitrates in water. Use of a water chemistry model, MINTEQA2 to estimate species concentrations given the total metal, pH, and redox conditions. One additional contact hour for the laboratory is required. Three one hour lecture/one two hour lab. Prerequisite: CHM 1202.
ENE 3315. Fundamentals of Air Quality Engineering (II; 3) Characterization and control of air pollution problems. Analysis of fundamental chemical and physical processes governing pollutant transport and dispersion in air. Combustion chemistry of hydrocarbon fuels. Air pollution control systems. Pollution sources, control techniques with introduction to sensors. Transformations, atmospheric transport, deposition, and modeling. Indoor Air quality management. Three one-hour lecture.	**ENE 3320. Engineering Hydrology (I; 3)** Physical hydrology phases hydrologic cycle -evaporation, precipitation, infiltration, and runoff. Physical and empirical models of evaporation from water bodies, evapotranspiration models; Precipitation measurement and assessment of temporal and spatial variability; Infiltration theory and modeling; rainfall runoff correlation in watersheds - overland flow, hydrographs, and flow routing; Empirical models of rainfall runoff correlation; statistical hydrology concepts; Environmental Hydrology. Three one-hour lecture/one two-hour lab. Prerequisites: ENE 3305 and MTH 2001.	**ENE 3325. Groundwater Hydraulics (II; 3)** Study of aquifers and their characteristics- porosity, specific yield and specific retention, permeability, and transmissivity. Darcy's law and fluid continuum in soils; steady flow through confined/ unconfined/artesian aquifers with and without recharge; hydraulics of wells in confined and unconfined aquifers; design of wells; estimating groundwater characteristics using pumping data; groundwater contamination - site assessment, geologic study, plume delineation and remedial action. Introduction to groundwater flow models using MODFLOW; Well-head protection. Three one-hour lecture/one two-hour lab.

		Prerequisites : ENE 3305, and GEL 1101 or Instructor's permission.

ENE 4405. Applied Hydraulics (II; 3) Application of principles of fluid mechanics to flow in pipes, pipe networks, open channels, and hydro-machinery. Estimation of pressure distribution in pipe networks; Design of pipe networks; friction loss computation using Darcy-Weisbach, HazenWilliams and Manning equations, solutions to pipe network problems using HardyCross method, and use of computer models for the hydraulic design of pipe networks. Nonuniform flow in open channels and its application to flooding in rivers; introduction to unsteady flow in pipes and open channels; dimensional analysis; hydraulics of pumps and turbines; and introduction to sediment transport in rivers. Prerequisite: ENE 3305.	**ENE 4410. Water Model Applications (I; 4)** This will be an applied course in the use of various water quality and water quantity models used in the water industry. The areas will cover hydrology, hydraulics, groundwater, and water quality. Emphasis on problem solving with real world conditions. Models considered include HEC-HMS and RAS, GMS, QUAL2EU, EPANET, WMS. Prerequisite: ENE 3325 or permission of the instructor.	**ENE 4415. Water Supply (I; 3)** The course will focus on the design and operation of water supply facilities-collection, treatment, and distribution. US EPA regulations on water quality, water quality standards, clean water act; water abstraction systems; theory and design of physical and chemical treatment systems-screening, sedimentation, coagulation, filtration, softening and disinfection. Water distribution pipe networks; laboratory experiments include jar testing for coagulants, and an analysis of trihalomethanes. Three one-hour lecture/one two hour for laboratory work and design calculations. Field trip to a local water treatment plant. 214 Prerequisites: ENE 3309 and MTH 2503.
ENE 4425. Solid and Hazardous Waste Management (II; 3) Municipal solid waste topics include history, regulations, sources, composition, properties, engineering principles in handling, transferring, and transporting, material separation, processing technologies, recycling, thermal conversions, design of incinerators, biological and chemical conversions, and remediation. Topics related to hazardous waste including identification, segregation, labeling, storing, disposal and clean up, and related hazardous waste regulations. Three one-hour lecture classes. Prerequisite: CHM 1202.	**ENE 4430. Wastewater Treatment Systems (II; 3)** A process design approach to studying wastewater treatment systems. Study of wastewater flows-quantity and quality. Study of sewer system design and maintenance. Fundamentals of reactor design with illustrations from wastewater treatment systems. Theory and design of key unit operations in wastewater treatment plant. Primary treatment processes-grit settling chambers and Parshall flume design, mechanically agitated screens, primary clarifier, and odor control unit; Secondary treatment suspended growth systems; activated sludge with various configurations on feed and oxygen introduction, and oxidation ditch; attached growth systems theory of biofilms, design of trickling filters and rotating biological contactors. Solids handling: sludge digester theory and design, sludge loading and dewatering, digester gas and cogeneration. Field trip to a wastewater treatment plant. Laboratory experiments include wastewater characterization and disinfection bi-products identification using gas chromatograph/mass spectrophotometer. Three one hour lecture/one two hour for laboratory work and design calculations. Prerequisites: BIO 2650, ENE 4415.	**ENE 4435. Soil and Water Pollution Control (II; 4)** An advanced course that deals with physical and chemical characteristics of pollutants in soil and water and their fate and transport; thermodynamic properties of organic and inorganic pollutants in soil and water; equilibrium partitioning of pollutants in the environment; air to water partitioning using Henry's Law; vapor pure liquid partitioning using Raoult's Law; soil-water partitioning using Freundlich, Langmuir and BET sorption isotherms; modeling fate and transport of pollutants in soil and water, non-aqueous phase liquids. Use of 1-D groundwater models such as CXTFIT; Groundwater contamination using CHEMFLO and MODFLOW; Overview of remedial technologies discussion on engineering controls such as pump and treat and soil washing, biological treatments such as bioremediation and phytoremediation; case study on non-point source pollution. Prerequisites: ENE 3309 and ENE 3325.

ENE 4440. Environmental Professionals Seminar (I, II; 1) Discussions led by working professionals in the field of Environmental Engineering on selected topics in the field. Designed to expose students to a wide range of practitioners and issues.	**ENE 4496. Senior Capstone Design Project I (I; 1)** The first part of a two-course sequence. It is designed for graduating seniors to integrate the knowledge they had gained in all ENE courses and apply in a field application/capstone design project related to a topic of interest within the field. Each student/student team will be required to work on an engineering project such as designing a typical environmental engineering system or recommending improvements in the operation of an environmental control system. Students will be expected to submit a formal report and an oral presentation to the Environmental Engineering Professionals class. This course involves selection of a topic and advisor(s), conducting literature search, understanding codes and regulations, conceptual design, selection of design tools, plan of work, and securing necessary resources.	**ENE 4497. Special Problems in Environmental Engineering (I, II, III; 3)** Individual study in advanced water resources management research. Open only to juniors and seniors.
ENE 4498. Senior Capstone Design Project II (II; 2) The second part of a two-course sequence. It is designed for graduating seniors to integrate the knowledge they had gained in all ENE courses and apply in a field application/capstone design project related to a topic of interest within the field. Each student /student team will be required to work on an engineering project such as designing a typical 215 environmental engineering system or recommending improvements in the operation of an environmental control system. Students will be expected to submit a formal final report and an oral presentation to the Environmental Engineering Professional class. This course involves design implementation, evaluation of alternatives, economic analysis, and inclusion of public health, safety, and welfare aspects Prerequisite: ENE 4496.	**ENE 4596. Internship (I, II, III; 0)** On the job training in agencies and/or companies engaged in activities related to environmental engineering/ water resources management. Not open to students who have participated in the co-op	

EXERCISE SCIENCE

EXS 1100. Introduction to Exercise Science with Lab (I, II; 4) This course provides an overview of selected topics in exercise science and sports medicine with emphasis on practical applications. This introductory course content is essential for all exercise science majors, as well as other health professionals, who may council the general public on exercise and physical activity. Laboratory portion of this course will include basic physical assessment techniques, proper use, care, and calibration of lab equipment.	**EXS 1155. Research Practicum I (I, II, III; 1)** This is an experience in observation related to ongoing research in an on/off campus research setting. Students observe procedures, design, concepts and theories of research related to health, exercise, or human performance. Students observe procedures, design, concepts, and theories of research related to health, exercise, or human performance. Prerequisite: EXS 1140.	**EXS 1156. Clinical Practicum I (I, II, III; 1)** This course is an experience in either an on campus/off site health/sports related facility or clinical setting. Students observe practical applications of the concepts and theories of a career related to health, corporate, community, or clinical setting. Students observe practical applications of the concepts and theories of a career related to health, corporate, community or clinical setting. Prerequisite: EXS 1140.
EXS 1200. Basic Nutrition (I, 2) Basic facts and principles of human nutrition are presented providing an integrated overview of the physiological requirements and functions of protein, energy, and the major vitamins and minerals that are determinants of health and diseases in human populations.	**EXS 1250. Mindfulness and Inner Well Being (I, II; 3)** The course is designed to offer experiential learning of mindfulness awareness practice (MAP). The student will have the opportunity to learn the evolution of mindful practice from a neurobiological perspective and will discuss the benefits of mindfulness practices on improving focus, stress reduction, memory retention and creative thinking. In addition to the MAP students will learn to practice breathing exercises and body alignment exercises. Each class is a combination of lecture, practice, and group feedback and discussion. The writing practice will engage students in class to create a reflective journal that will be shared with the group in ongoing read-back throughout the semester.	**EXS 2101. Applied Anatomy and Physiology I (I, II; 3)** An introduction to human anatomy and physiology, characteristics of life, levels of system organization, biochemical processes, cellular structure/function, integumentary system, skeletal system, muscular system, and nervous system with emphasis on the application of the structures and functions to human movement. Designed for students interested in pursuing study in physical education, health education, community health and exercise science.
EXS 2102. Applied Anatomy and Physiology II (I, II; 3) An introduction to human anatomy and physiology, special senses, endocrine system, lymphatic system, blood, cardiovascular system, respiratory system, digestive system, urinary system, water and electrolyte balance, female, and male reproductive systems with emphasis on the application of the structures and functions to human movement. Designed for students interested in pursuing study in physical education, health education, community health and exercise science. Prerequisite: EXS 2101.	**EXS 2202. Nutrition for Health and Exercise Across the Lifespan (I, II; 3)** This course discusses the nutritional requirements of an individual throughout the lifespan. A review of the specific assays and examinations to determine good nutrition health will be discussed. The course highlights the general nutrition needs of pregnancy, infancy, children, 216 adolescents, adult, and the older adults. There will be discussions related to eating disorders, metabolic disease, and physical activity.	**EXS 2204. Research Design and Statistics in Health and Exercise (I, II; 3)** This course is designed to introduce the students to research and principles of qualitative and quantitative research methods. The students will discuss the application of research principles related to health and human performance, current research related to human subjects and ethical treatment of human and animals in research. Prerequisite: EXS 1140.

EXS 2210. Salutogenesis (I, II; 2) This course investigates the underlying causes of health and well-being versus disease. Salutogesis creates an exemplary new paradigm in medical research which is directed towards the origins of health. Intensive review of salutogenuc research and discussions will be basis of this course.	**EXS 2255. Research Practicum II (I, II; 2)** This course is an experience in observation related to ongoing research in an on/off campus research setting. Students observe procedures, design, concepts, and theories of research related to health, exercise, or human performance. Students may participate in the active research with permission of the Principal Investigator. Prerequisite: EXS 1155.	**EXS 2256. Clinical Practicum II (I, II; 2)** This course is an experience in either an on campus/off site health/ sports related facility or clinical setting. Students observe practical applications of the concepts and theories of a career related to health, corporate, community or clinical setting. Students will observe and may begin to integrate in the setting by performing tasks approved by clinical setting administration.

EXS 2260. Principles of Exercise Leadership (I; 3) This course covers the practical aspects of having a successful fitness center. Students will be provided opportunities to lead various types of group exercise classes and perform physical assessments on groups as well as individuals. This course is designed to be very practical and hands-on.	**EXS 2301. Anatomy & Physiology I with Lab (I; 4)** This course will introduce the fundamental microscopic and gross anatomical structures of the human body and physiological mechanisms involved in normal functioning, disease, and exercise through classroom instruction and laboratory activities. In this course, students will learn anatomical terminology, body organization, and homeostasis; review cell structure/function; and explore histological and the integumentary, skeletomuscular, and the nervous systems. There will be strong emphasis on the interrelationship between structure and function in both health and disease states. There will be three hours of classroom instruction and two hours of laboratory activities per week. Prerequisites: BIO 1705 or BIO 1801.	**EXS 2302. Anatomy & Physiology II with Lab (II; 4)** This course will introduce the fundamental microscopic and gross anatomical structures of the human body and physiological mechanisms involved in normal functioning, disease, and exercise through classroom instruction and laboratory activities. In this course, students will explore the cardiovascular, endocrine, lymphatic, immune, respiratory, digestive (including metabolism), urinary, and reproductive systems. There will be strong emphasis on the interrelationship between structure and function in both health and disease states. There will be three hours of classroom instruction and two hours of laboratory activities per week. Prerequisites: EXS 2301.
EXS 2410. Medical Terminology (I, II; 3) This course is designed to familiarize students with the basics of vocabulary used in the medical and health professions. Students will gain understanding of the basic elements, rules of the building and analyzing medical words, and medical terms associated with the body as a whole. Utilizing a systems approach, the student will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, oncology, and pharmacology. In addition to medical terms, common abbreviations applicable to each system will be interpreted.	**EXS 3000. Biomechanics (I; 3)** The anatomical and physiological analysis of human motion emphasized for the purpose of promoting normal development and improvement of performance. Mechanical 217 physics principles will be discussed as they are related to the structure and function of the human body as it moves. Anatomy and physiology of the neuromuscular system will be reinforced, and students will be able to observe and describe human movement. Prerequisite: EXS 2302.	**EXS 3100. Ergonomics (I, II; 3)** This course provides the basics of ergonomics and determining healthy movement in work situations. Emphasis will be on determining safe movements in industrial and farming areas. Prerequisite: EXS 2102.

EXS 3200. Prevention & Care of Athletic Injuries (II; 4) Course stresses importance of prevention of injuries by conditioning and material aids and offers supervised training in caring of injuries. The course will also provide students with the opportunity to become certified in CPR and first aid. The course will consist of lecture and demonstration of these safety procedures. Prerequisite: EXS 2302.	**EXS 3280. Exercise as Medicine (I, II; 3)** The study of the mechanisms to make physical activity and exercise a standard part of a global disease prevention and treatment medical paradigm. Physical activity will be considered as a strategy for all health care providers as a vital sign in every patient's visit, and that patients are effectively counseled and referred as to their physical activity and health needs, thus leading to overall improvement in the public's health and long term reduction in health care costs.	**EXS 3300. Nutrition and Sports Performance (II, 3)** This course provides an overview of nutrition as it relates to preparation, recovery, and sports performance of athletes. This course will emphasize nutritional topics of interest to those populations. Prerequisite: EXS 2202.
EXS 3302. Nutrition in Health and Diseases (II; 3) There is now a large body of evidence demonstrating that diet has a major impact on health. The course will begin by looking at nutrition research. Without some understanding of how nutrition advances are made, you cannot properly appreciate the significance of conflicting claims. Dietary causes of chronic diseases related to lifestyle, including hypertension, coronary heart disease, diabetes, obesity, and cancer. Later units deal with other special topics. Prerequisite: EXS 2202	**EXS 3312. Psycho-Behavioral Aspects of Physical Activity (I, II; 3)** The course is an overview of behavioral change and how utilizing both modern and tradition models can impact behavior in relation to motivation and identifying the various how stages of readiness. This course examines common theories of behavior change and identifies scientific evidence supporting the utilization of the models of change to support a healthy lifestyle.	**EXS 3320. Global and Cultural Issues in Nutrition (I, 3)** This course presents the ways in which cultural, ethnic, religious, and social factors influence health beliefs, food behavior, and dietary patterns and introduces challenges and strategies of intercultural communication within the field of human nutrition. Prerequisite: EXS 2202
EXS 3333. Exercise and Health Disparity (I, II; 3) This course focuses on some basic issues to health disparity in the United States. The identification and metrics associated with identifying health disparity will be discussed. An in-depth discussion will focus on the impact of exercise on health disparity and strategies of delivering positive heath practices to various populations and geographic environments.	**EXS 3342. Applies Exercise Physiology (II; 3)** In-depth examination of the effects of acute and chronic exercise on the human body and applications to sport, work, wellness, research, and clinical settings. Topics will cover the application of exercise physiological principles as related to an impact on environments such as occupational/work, employee wellness, sports, safety/public governmental agencies, health, disease prevention, pedagogy, coaching and rehabilitation. Prerequisite: HHP 3330 and HHP 3340.	**EXS 3355. Research Practicum III (I, II; 3)** This course is an experience in observation related to ongoing research in an on/off campus research setting. Students observe procedures, design, concepts, and theories of research related to health, exercise, or human performance. Students participate in active research with permission of the Principal Investigator. Prerequisite: EXS 1155 and EXS 2255.
EXS 3356. Clinical Practicum III (I, II; 3) This course is a 218 experience in either an on campus/off site health/sports related facility or clinical setting. Students observe practical applications of the concepts and theories of a career related to health, corporate, community or clinical setting. Students will integrate in the setting by performing tasks approved by clinical setting administrations.	**EXS 3380. Molecular and Cellular Aspects of Human Movement (II; 3)** An advanced study of human body biochemical and molecular processes during exposure to acute and chronic physical stress and the impact upon health and performance. Detail to applied biometrics that measure energetics-body composition. Caloric, oxygen consumption and related assessments of organ systems impacted by exercise exposure. Prerequisite: HHP 3330 and HHP 3340.	**EXS 3381. Genetics for Exercise Science and Health (II; 3)** The study of the basics of DNA and genetics as they relate to health, physical activity, and sport. Specific skills and strategies for interpreting, applying genetics findings in research and how genetics research may affect sport performance training and clinical practice. Ethical issues of genetics in society and sport will be discussed. Prerequisite: EXS 2101.

EXS 4401. Seminar: Current Research in Exercise Science (I, II; 1) This course covers current topics related to the field of exercise science. The seminar will address current issues in exercise science as determined through researching relevant literature. This course will include interactive discussions and presentations related to exercise science topics.	**EXS 4419. Principles of Sports Conditioning (I; 3)** Theory and application of biochemical and physiological principles to the development of strength and conditioning programs for selected sports. The course will cover the applied exercise training principles related to youth, amateur, collegiate, and professional sports. Successful completion of the course will prepare students for national certification examinations for the National Strength and Conditioning Association or the American College of Sports Medicine. Prerequisite: HHP 3330, HHP 3340, and HHP 3380.	**EXS 4200. Seminar in Exercise Science (II; 3)** This capstone course will review knowledge, skills, and abilities required of all graduates of exercise science and provide students with opportunities to demonstrate their skills. Prerequisite: Sophomore Standing.

EXS 4420. Introduction to Exercise Electrocardiography (I; 2) Study of basic normal and abnormal electrocardiography at rest and during exercise. The course is designed to train students in exercise science to recognize normal and abnormal heart rhythms associated with rese and exercise. Electrocardiographic recognition skill development will be critical in the supervision of graded exercises test. The course will prepare the student for national certification by the American College of Sports Medicine. Prerequisite: 3340.	**EXS 4421. Clinical Exercise Testing and Prescription (II; 3)** Practical experience conducting graded exercise tests using various modes of exercise and utilizing the data to develop appropriate exercise prescription with emphasis on normal and disease populations. The course will prepare students for the national certification examinations by the American College of Sports Medicine. Prerequisite HHP 3340 & EXS 2302.	**EXS 4422. Exercise in Special Populations (I; 2)** An advanced course in prescribing exercise and supervision of populations with various patho-physiological conditions. Overview of exercise testing, electrocardiogram (EKG) interpretation, and exercise prescription and programming for monitoring individuals with special conditions due to age or disease (e.g., cardiac disease and abnormalities, hypertension, obesity, cancer, diabetes, neuromuscular disease, etc.). Prerequisite: EXS 4421.
EXS 4425. Workplace Wellness and Health Promotion (II; 3) An overview of the theoretical and pragmatic aspects of conducting health promotion programs in the workplace. Discussions of rationale and relative effectiveness of various health components will be covered. Topics such as presenteeism, financial impact of illness on the financial health of a company and development of wellness services within a corporate environment will be discussed. Various assessments to determine the health of employees and program development to address corporate health and wellness needs will be addressed.	**EXS 4440. Work Physiology (I, II; 3)** A general introduction to anatomical structure, metabolism and biomechanics related to various occupations. This course, while presenting the anatomy and physiology needed to understand occupational life, will provide information related to conditions of physiological stress humans experience under occupational conditionals and training strategies to reduce stressors to promote a safe work environment. Prerequisite: HHP 3340 and EXS 3342.	**EXS 4490. Exercise Clinical Experience (I, II, III; 8)** The student will actively participate in corporate, clinical, educational, or field-related organizations receiving practical experience under the supervision of the cooperating agency/corporation and the University Coordinator. Students will not be permitted to take any other courses during this internship/research course due to the intensive time commitment. Prerequisite: Sophomore Standing.

EXS 4491. Clinical Experience in Exercise Science I (offered at the discretion of the department; 4) The student will actively participate in corporate, clinical, educational, or field related organizations receiving practical experience under the supervision of the cooperating agency/corporation and the University Coordinator and instructor. Prerequisite: Sophomore Standing	**EXS 4492. Clinical Experiences in Exercise Science II (offered at the discretion of the department; 4)** The student will actively participate in corporate, clinical, educational, or field-related organizations receiving practical experiences under the supervision of the cooperating agency/corporation and the University Coordinator and instructor. Prerequisite: Sophomore Standing	

FINANCE

FIN 2233. Personal Finance (II; 3) Personal money management problems are examined with special attention given to credit, borrowing, insurance, buying and selling a home and taxation. Analysis of investment companies, securities, estate planning, retirement, Medicare, and Social Security. Prerequisites: BUS 1100 and ENG 1102.	**FIN 3332. Investments (II; 3)** Introduces historical risk returns, return variability analysis; buying/selling securities; investor objectives; constraints and strategies; securities types, derivatives, and options; mutual funds; and stock market organization and reporting. Prerequisite: BUS 3331.	**FIN 3333. Financial Institutions (I; 3)** This course provides an overview of financial markets and institutions; determination of interest rates; structure of interest rates; organization of the Federal Reserve and its monetary tools; monetary theory and policy and its relation to fiscal policy. Prerequisite: BUS 3331.

FIN 3334. Principles of Real Estate (I, II; 3) Course surveys the entire field of real estate designed for a broad basic knowledge to form a foundation for many facets included in the real estate profession. Prerequisite: BUS 3331.	**FIN 3335. Insurance (II; 3)** Fundamental nature of risk and its importance and place in personal, business, and national life. A study of risk-bearing and the theory of probability. Topics in life, health, and accident insurance. Prerequisite: BUS 3331.	**FIN 3336. Real Estate Law (I; 3)** Basic concepts of Real Estate Law will be taught, introducing the concept of a dynamic law which reflects the economic, political, and social needs in relation to the state of real estate in our time. Prerequisites: BUS 2200 and FIN 3334
FIN 3337. Real Estate Appraisal (II; 3) A study in determining values, both actual and potential for real estate properties and interest employing standard methods and techniques. Prerequisite: FIN 3334.	**FIN 3338. Real Estate Finance (I; 3)** Course involves conventional financing techniques; specialized financing arrangements such as financial aspects of condominiums cooperatives, real estate trusts (REITS), syndication, land contracts, sale of leasebacks, equity participation, wrap around mortgages, GNMA pass-through securities; the operation of PHLBB, FHLMA, GNMA as well as financial arrangements involving banks, savings, or loan associations. Prerequisite: FIN 3334.	**FIN 4431. Financial Management (II; 3)** A study of capital budgeting and cash flow principals used in expansion, replacement, and long-term investments. Calculate and interpret payback period, net present value, and internal rate 220 of return. Understand the importance of explicitly recognized risk in the analysis of capital budgeting projects; understand the financial planning process, including bankruptcy reorganizing or liquidating a bankrupt firm. Prerequisite: BUS 3331.
FIN 4432. Investment Analysis (; 3) A study in stock price behavior and market efficiency, measuring bond yields, and nominal interest rates, corporate bonds, and government bonds. Prerequisite: FIN 3332.	**FIN 4437. International Finance (I, II; 3)** An introduction to international business finance, financial firms, and foreign exchange markets. Includes a study of international money and the balance of payments. Additional topics include foreign exchange markets, forecasting, examining parity relationships, management of foreign exchange rate exposure, and analysis in global financial management. Prerequisite: BUS 3331.	**FIN 4438. Seminar in Finance (I, II; 2**) A course dealing with contemporary finance problems. Prerequisites: Senior standing and permission of the instructor.

FIN 4442. Financial Statement Analysis (II; 3) This course provides a broad framework for using financial statement analysis to evaluate a firm's operation and to predict its future condition. This course allows the student to develop a critical user perspective for analyzing and interpreting financial statements and gaining further insight into a firm's operational and financial performance. Prerequisite: ACC 3302	**FIN 4466. Internship in Finance (On Demand; 1-6)** Course provides the opportunity to explore practical experience in finance. Student activities will be supervised by the organization sponsoring the internship. The Office of Career Services and the responsible faculty monitor internships. A comprehensive report is required at the completion of the internship. Prerequisite: Permission of the instructor.	**FIN 4497. Independent Study in Finance (II; 1)** This course offers the student the opportunity to investigate current trends and advanced problems in finance. Student research will be under the direction of the instructor. Prerequisites: Senior standing and permission of the instructor.
FIN 4500. Finance Capstone Seminar (I, II; 3) The course consists of group discussions among several cases and readings, as well as lecture sessions. Most of the problems raised in the cases are strategic in nature rather than tactical. In addition to the lectures and case discussions, we use articles from the business press to focus on controversial issues and discrepancies between theory and practice. Prerequisites: FIN 4437; Senior standing and permission of the instructor.		

GEOGRAPHY

GEO 1101. World Geography: Western geographic Hemisphere (I; 3) A survey of the western hemisphere to acquaint non-majors with cultural and geopolitical facts and principles that will assist them in interpreting contemporary events. Equivalent to TAG OSS008.	**GEO 1103. World Geography: Eastern Hemisphere (II; 3)** A geographic survey of the eastern hemisphere to acquaint non-majors with cultural and geopolitical facts and principles that will assist them in interpreting contemporary events in Africa, Asia, and Oceania.	**GEO 1110. Fundamentals of Geography (I, II; 4)** The course gives students an understanding and appreciation of the earth as the home of man and studies the rudiments of the physical and cultural environment and the cognate and coordinating character of geography among the social sciences. This course serves as a point of departure for future studies in geography. Equivalent to TAG OSS006
GEO 2202. Economic Geography (II; 3 - Even Years) A study of the geographic environment as related to the economic activities and pursuits of mankind. The major economic activities of man as well as the resource patterns of the earth are studied.	**GEO 2203. Geography of Latin America (II; 3 - Odd Years)** A study of the geographic factors, physical and cultural, that are basic to an understanding of the historical and contemporary development of Mexico and the countries of Central America, the West Indies, and South America.	**GEO 2204. The Geography of Anglo-America (I; 3 – Even Years)** A regional study of the U.S., Canada and U.S. territories which emphasizes analysis of the geographic environment and its impact on the socioeconomic development of regions.

GEO 3302. The Geography of Asia (II; 3 - Odd Years) A regional study of the Near, Middle and Far East. Emphasis is placed upon the interpretation of the environmental elements of the continent, and their relevance to the socioeconomic and geopolitical aspects of the continent.	**GEO 3313. Weather and Climate (II; 3)** Designed to give some understanding of the elements and control of climate, climatic phenomena, climatic types, and the characteristics of the major types and classifications of climates as they are found on the continents. Daily observations will be made by the student in the laboratory and a log will be kept.	**GEO 3323. The Geography of Europe (II; 3 - Even Years)** A regional study of Europe with an emphasis on the analysis of the geographic environment of Northern, Western, Southern and Eastern Europe and its impact on the socio-economic and geopolitical aspects of the continents.
GEO/WRM 3370. Introduction to Geographic Information System (I; 3) Topics of instruction will include analyses of selected, spatially distributed information of national resources and other societal parameters. Nature, characteristics, specification, types, acquisition, processing, organization, and management of spatial or geographic data. Application of the basic functional and analytical capabilities of GI systems using raster methods and vector methods and vector methods. The course will include practical instruction on commonly used geographic information software (GIS). Prerequisites: MTH 2501 or higher. Equivalent to OSS026.	**GEO 4370. Advanced Geographic Information Systems (II; 3)** This course is 225 designed for advanced learning of the Geographic Information Systems (GIS), covering the upper-level topics in GIS, including network analysis, spatial statistics, spatial analysis, 3D visualization, integration of the Global Positioning System (GPS), and Remote Sensing, as well as applications in transportation, public health, hydrology, and marine science. The course will focus on the advanced spatial analytical feature and tools of the foremost GIS software. Prerequisite: GEO 3370.	**GEO 4404. Conservation of World Natural Resources (I; 3 - Odd Years)** Economic and geographical appraisal of resource conservation in the world. Geography of reserves, production, and the uses of the world's metallic and nonmetallic minerals. Prerequisites: GEO 1110 and GEO 2202, or 10 hours of social science or permission of the instructor.
GEO 4405. World Political Geography (II; 3 - Odd Years) The geographical character of the nation-state. The relation of geopolitics to political geography. Prerequisites: GEO 1110 and GEO 2202, or permission of the instructor.	**GEO 4406. World Cultural Geography (I; 3 - Even Years)** A study of the geographic occupation, settlement, and development of selected regions of the world.	**GEO 4411. Urban Geography (I; 3 - Odd Years)** Origin and growth of cities. Structure and function of urban centers, their area expansion, and trade interrelationships; examples will be studied in relation to city planning. Prerequisites: Junior or senior standing, GEO 1110 and GEO 2202.
GEO 4413. Geography of Russia and the Commonwealth (II; 3 - Even Years) The study of the major Soviet regions. The resource base in relation to the economic and political structures or aspects in the Soviet regions. Prerequisites: Junior or senior standing, or GEO 1110 and GEO 2202.	**GEO 4414. Geography of Africa and Its Problems (I; 4 - Even Years)** A regional study of the many geographies of Africa, its environments, the development of its culture and economic life, and its problems; analysis of western and Islamic impact on the creation and development of geographic regions. Prerequisites: Junior or senior standing, or GEO 1110 and GEO 2202.	**GEO 4415. The Political Geography of Africa (II; 3 – Odd Years)** A survey of the geographic factors in the settlement, formation, structure and intra African relations of African States. The relation of geopolitics to Africa's political geography.

GEO 4450. Special Problems in Geography (I, III, III; 3) Individual research in the area of the student's interest. Prerequisites: Senior major or minor and permission of the instructor.	**GEO/GEL/WRM 4470. Applied Remote Sensing (II; 3)** This course students will learn about different instrument systems attached to aircraft and satellites that collect environmental data. Practical instruction on how the remotely acquired data sets are processed and interpreted using appropriate software will be given. Interpretation of multispectral scanners, RADAR, and thermal imagery data; Data analysis for detection of changes; image interpretation; study of spectral characteristics of vegetation, soils water, minerals, and other materials. Case studies will be presented for the different types of application. Prerequisite: MTH 2501.	**GEO 4495. Senior Project in Geography (On Demand; 3)** This course is designed for graduating seniors to integrate the knowledge they gained in all Geography courses and apply it to a topic of interest in a field application project. Students will be required to choose a topic from a variety of projects pertaining to the field of Geography. Prerequisite: Senior standing in the major field.

GEOLOGY

GEL 1101. Physical Geology (I; 4) The origin of the earth, the solar system, and the universe; the interior of the earth and its materials. A study of the agents, including the atmosphere, the oceans, surface water on land and their effects on shaping the surface of the earth. There will be one all-day field trip. Lab is required. The lab includes plate tectonics, mineral and rock identification, geologic time relationships, interpretation of topographic maps, identification and interpretation of geologic structures and groundwater. Equivalent to TAG OSC011.	**GEL 1105. Historical Geology (II; 4)** The history of the earth and how geologists have learned to interpret it. The origin of life and the history of organic evolution. Physiographic and tectonic changes through earth 226 history with special emphasis on North America. Three hours of lecture and a two-hour laboratory per week and one all day field trip. Equivalent to TAG OSC012.	**GEL 1110. Oceanography (I; 3)** Physiography of the ocean floors. Composition and structure of the ocean crust. Field and laboratory methods in marine geology. Marine sedimentation and the hydrodynamic, chemical, and biochemical processes involved. Origin and evolution of the oceans and the ocean basins.
GEL 1240. Natural Disasters (I, II; 3) An examination of the causes, effects, and options available to mitigate natural disasters such as earthquakes, volcanic	**GEL 2205. Environmental Geology (II; 3)** Covers broad range of topics, all related by the interactions between geologic processes and society. These include	**GEL 3305. Introduction to Geophysics (II; 3)** This course is an introduction to methods used to visualize and understand the history, shape,

eruptions, landslides, subsidence, flooding, severe weather, and meteoritic impacts. No prerequisites are required, and the course does not include a lab.	natural hazards, natural resources, and their policy implications in the face of an unrelenting increase in human population and economic growth. Students will be able to define and discuss fundamental geologic principles. Prerequisite: GEL 1101 or permission of the instructor.	mechanical structure, and dynamics of the solid-earth system. We will discuss how geophysical tools, including seismology, gravity, magnetism, heat flow, geochronology, and geodesy, are used to understand the age, whole-earth and near surface structure, and to quantify the kinematics and dynamics of plate tectonics. Students will explore the most common geophysical methods applied in environmental studies, geohazards, water resources and engineering studies; physical parameters are measured using each method. Supplemental math instruction included. Prerequisite: GEL 1101, MTH 1750 or PHY 1181.
GEL 3311. Paleontology (I; 4 - Odd Years) A detailed study of fossils. Special emphasis is given to more stratigraphically significant types, especially invertebrates. Three one-hour lectures and one two-hour laboratory per week. Lab is required and is part of the five-hour credit. Prerequisite: GEL 1105.	**GEL 3321. Mineralogy (I; 4 - Even Years)** Description, properties, occurrences, and methods of determination of the more important minerals, and an introduction to the principles of crystallography: Lab is required and is part of the four-hour credit. Prerequisite: CHM 1201 and GEL 1101 or permission of the instructor. Equivalent to OSC013.	**GEL 4401. Stratigraphy and Sedimentation (I; 3 – Even Years)** The principles of stratigraphy; correlation, facies relationships, fossil distribution and stratigraphic maps. The principles of sedimentation; nature of sedimentary rocks; and environmental controls on their composition, texture, and distribution. Prerequisites: GEL 1101 and GEL 1105.
GEL 4421. Petrology (II; 3 - Odd Years) Study of origin, formation, and occurrences of igneous, sedimentary, and metamorphic rocks with particular reference to modern geochemical investigations. Examination and description of hand specimens and thin sections under the petrographic microscope. Prerequisite: GEL 3321.	**GEL 4435. Mineral Deposits (II; 3 - Odd Years)** A study of the geology, economics, and politics of mineral deposits, including their genesis, classification, and description. Prerequisites: GEL 1101, 1105 and 3321 or permission of the instructor.	**GEL 4450. Special Problems in Geology (I, II, III; 3)** Individual research in the of the student's interest. Prerequisites: Senior standing (major or minor in geography) and permission of the instructor.
GEL 4460. Process Geomorphology (II; 4) This course is a study and analysis of the origin, characteristics, and modification of landform on Earth's surface by dynamic systems through geologic time. Includes Earth's dynamic surface systems, such as orogenesis (mountain building); tectonics; erosion; shoreline processes; landslides; and transport and deposition by rivers, glaciers, wind, and gravity. The analysis of landforms and processes in this course will be directed using a largely quantitative approach, with written reports and a field-oriented project. Supplemental math instruction included. Field trips will provide opportunities for students to observe Ohio and Kentucky examples of several geologic processes and their 227	**GEL 4495. Senior Project in Geology (II; 3)** This course is designed for graduating seniors to integrate the knowledge they have gained in all geology courses and apply it in a field application project related to a topic of interest within the field. Students will be required to choose a topic from a variety of projects pertaining to the field of geology.	

resulting landforms. Prerequisites: GEL 1101, MTH 1750 or PHY 1181.		

HEALTH AND HUMAN PERFORMANCE

HHP 1000. Health and Wellness (I, II, III; 2) Designed to enable students to enhance personal wellness by gaining understanding of the social, physical, spiritual, and emotional dimensions of health, and by applying various strategies for improving personal health behaviors. (Required for graduation.)	**HHP Activity Courses (I, II; 1)** Designed to provide students with the knowledge, skills, practice, and understanding needed for successful participation in selected activities. HHP 1101. Archery HHP 1102. Yoga HHP 1103. Cycling HHP 1104. Fencing HHP 1105. Golf HHP 1106. Advanced Golf HHP 1107. Racquetball HHP 1108. Beginning Swimming HHP 1109. Advanced Beginning Swimming HHP 1110. Intermediate Swimming HHP 1111. Beginning Tennis HHP 1112. Advanced Tennis HHP 1113. Volleyball HHP 1114. Aerobic Dancing HHP 1115. Conditioning and Weight Training HHP 1116. Prescriptive Exercise HHP 1117. Badminton HHP 1118. Walking for Fitness HHP 1119. Water Aerobics HHP 1120. Basketball HHP 1121. Fitness for Life	**HHP 1130. Introduction to Health, Physical Education, and Recreation (I; 2)** An orientation course concerned with philosophy and career opportunities in the three fields. Open to majors and minors in HHP or students who are not sure of a major area of concentration.
HHP 1131. Skills I (II; 2) Provides Recreation majors and minors with the knowledge, skills, practice, and understanding of gymnastics from beginning to advance level. Focuses on fundamental motor skills, mixers, and line, ballroom, and square dance needed for successful participation. Exposes students to a variety of teaching methods for these activities. Prerequisite: HHP 1130; open to majors only.	**HHP 1132. Skills II (I; 2)** Provides Recreation majors and minors with the knowledge, skills, practice, and understanding of volleyball and soccer needed for successful participation. Exposes students to a variety of teaching methods for these two sports. Prerequisite: HHP 1130.	**HHP 1133. Skills III (II; 2)** Provides Recreation majors and minors with the knowledge, skills, practice, and understanding of badminton and track and field needed for successful participation. Exposes students to a variety of teaching methods for these two sports. Prerequisite: HHP 1130.
HHP 1134. Skills IV (I, II; 2) Provides Recreation majors in methods techniques and basic skills in racket sports needed for successful participation.	**HHP 1202. Nutrition for Health and Weight Control (I; 1)** Study of eating habit formation and modification for optimum wellness. Special emphasis will be given to sound, effective approaches to body weight reduction and maintenance.	**HHP 2222. History and Principles of Recreation (I; 2)** A study of the philosophical, psychological, educational, and sociological foundations of sports, recreation, and leisure services. Covers the individuals, events, and principles that influenced the development of organized sports, recreation, and leisure services
HHP 2230. First Aid and Terminology (I, II; 3) An intensive study of the skills and knowledge involved in providing first aid, basic life support, cardio-pulmonary resuscitation (CPR), safety education, and methods of preventing accidents. Includes instruction in medical terminology.	**HHP 2231. History of Modern Dance (I; 1)** An analysis of the history of dance, teaching its role as religious ritual, art form, or popular entertainment, and viewing it in relation to the social context of each period and other major art forms.	**HHP 2232. Beginning Modern Dance (I; 1)** the purpose of this course is to support interest in and appreciation of modern 228 dance through participation in it as a creative form. Two one-hour laboratory periods are required.

HHP 2243. Lifeguard Training (II; 2) Completion leads to Red Cross Certification. Open to all University students who meet the prerequisite. Prerequisite: Satisfactory evidence of skill in swimming beyond intermediate level. Prerequisite: HHP 1110.	**HHP 2255. Clinical Teaching (I, II; 1)** This course is designed to give the student practical experience as a teacher-assistant in non-major physical education classes or in off-campus school or community agencies. A total of 20 laboratory hours are required. Prerequisite: Skill or experience in selected activity. HPER freshmen, sophomores, juniors only.	**HHP 3301. Mental, Substance, and Stress Education (I, II; 4)** Knowledge, techniques, and strategies for developing optimal mental and emotional wellbeing; includes an intensive examination of effective substance abuse education and stress management
HHP 3303. Healthful Lifestyles (II; 1) Analysis of the impact of lifestyle on wellbeing, and strategies for making health promoting lifestyle changes. Prerequisite: A personal and community health course.	**HHP 3307. Health and the Environment (II; 1)** Examination of current environment-altering forces and their impact on health. Prerequisite: HHP 1000 or the equivalent	**HHP 3310. School Health Programs (I; 2)** Health programs within the school. Special attention is given to school health services, healthful living, and the teacher's role in screening for referral and emergency care. Open to Health or Physical Education majors only.
HHP 3312. Sports Psychology (II; 2) A study of the social and psychological contributors of sports to human development and the psychological factors associated with sports performance.	**HHP 3317. Sports Officiating (II; 2)** This course provides knowledge of rules, techniques, and procedures for officiating individual, dual, and team sports. (Elective)	**HHP 3318. Principles of Coaching (I; 2)** This course provides knowledge of techniques, procedures, philosophies, and the psychology of coaching individual, dual, and team sports.
HHP 3320. Physical Education for Elementary School (II; 3) Methods and materials for teaching individual and group activities in elementary school. Study of the characteristics of elementary school children and active experience in appropriate activities to meet their needs. Observation of children required.	**HHP 3322. Recreation Leadership and Programming (I; 3)** An intensive examination of the knowledge, skills, methods, duties, and responsibilities inherent in providing leadership, programming, and delivery of services in recreation and sports.	**HHP 3325. Physical Education Methods/Field Experience (I, II; 4)** This course focuses on the development of various teaching and assessment methods and models for helping Adolescent and Young Adult candidates in Physical Education develop the skills necessary to both understand and apply language arts concepts in their classrooms. This course will include a field dimension of at least 80 hours during which candidates will be assigned to work with a cooperating teacher in an appropriate setting and gain greater command of their abilities to plan, implement and evaluate students in physical education. Evaluation of candidate performance will be a collaborative effort by the university instructor and the cooperating teacher using established assessment instruments. Prerequisite: Approval of program advisor
HHP 3326. Motor Development (I, II; 3) Motor development from birth through maturity; factors influencing the development and performance of motor skills; application of assessment and intervention strategies to improve motor performance for preschoolers through the elderly. Course includes 5-7 hours of an on-campus intervention clinical	**HHP 3330. Kinesiology (II; 3)** An integration of the anatomic and kinetic principles in the study of human motion. Application to the analysis and teaching of movement skills is stressed.	**HHP 3332. Creative Dance for Children (II; 1)** Instruction in children's movement experiences and how they may be presented in a creative and exploratory manner. Laboratory experiences required (Elective).

experience with preschool children. Prerequisite: Junior standing		
HHP 3335. Commercial Recreation (I; 2) The study of commercial recreation and sports organizations, including types of ownership and organization, and legal and financial operations (Elective).	**HHP 3340. Physiology of Exercise (II; 3)** This course focuses on the physiological response of the healthy body to exercise and training, stressing utilization of sound physiological principles in physical education and athletics. Consists of three lectures and a two-hour laboratory period per week. Prerequisite: HHP 3330.	**HHP 3343. Water Safety Instruction (II; 2)** Completion leads to Red Cross Certification in WSI. This course consists of two one-and-one-half hour laboratory periods per week. Prerequisites: HHP 2243 and Certification in Lifeguard Training
HHP 3345. African Traditional Dances: Cultural Significance (I; 1) An examination of the traditional dances of Africa and their cultural significance for the various African peoples. Emphasis will be placed on introduction and historical background; costumes; instruments; and preparations, formations, and procedures (Elective).	**HHP 3348. Family Life and Disease Education (I, II; 3)** An intensive examination and development of methods and materials for effective sex and family life education; includes an examination of various factors in the cause and prevention of disease.	**HHP 3350. History and Principles of Physical Education (I; 3)** A historical view of physical education and a study of the scientific and philosophical information used in planning, organizing, conducting, and evaluating modern physical education programs.
HHP 3355. Clinical Teaching (I, II; 1) This course is designed to give the student practical experience as a teacher-assistant in non-major physical education classes, intramural sports, and off-campus school and community agencies. A total of 20 laboratory hours are required. Prerequisites: HHP 2255 and skill or experience in selected activity. HPER freshmen, sophomores, juniors only.	**HHP 3361. Introduction to Therapeutic Recreation (I; 2)** A study of recreation services provided for the developmentally and physically disabled, mentally ill, the aged and other special populations.	**HHP 3362. Program Design in Therapeutic Recreation (I; 2)** A study of principles, procedures, and techniques for developing therapeutic recreation programs for the aged and challenged populations (Elective).
HHP 3363. Leisure Counseling (II; 2) A study of the techniques and procedures involved in providing leisure guidance, remedial-normalization, and lifestyle development services (Elective).	**HHP 4401. Seminar: Gerontological Health Issues (II; 1)** Review of health-related issues of special relevance to the elderly. Prerequisite: HHP 1000 or the equivalent (Elective).	**HHP 4402. Seminar: Holistic Health (II; 1)** Examination of the tenets and perspectives of the holistic health movement (Elective).
HHP 4408. Seminar: Current Issues in Health (II; 1) Examination of current areas of controversy in health which arise from the ethical, economic, and legislative milieu of our times. Prerequisite: HHP 1000.	**HHP 4410. Organization and Administration, of School and Community Health Programs (I; 3)** Principles, policies, and procedures for administering school and community health programs. Prerequisite: Senior standing in Health Education or a health-related major.	**HHP 4430. Foundations of Health (I; 2)** An introductory course which reviews concepts and policies for the conduct of school and community health programs. Prerequisite: Professional standing in Health Education or a health-related major.
HHP 4432. Tests and Measurements of Physical Education (II; 2) A study of evaluation, including test selection and procedures for interpretation and utilization of measurement data for physical education. Course consists of two hours of lecture and two hours of laboratory per week. Prerequisite: Professional standing (HPER majors only).	**HHP 4450. Adapted Physical Education (I, II; 3)** A course to 230 prepare prospective teachers to adapt a physical education program so that all children can successfully participate in activity programs. Focus on the study of the atypical child in order to organize and administer a program which will meet individual needs. Clinical field experience required. Prerequisites: HHP 3320 and HHP 3330.	**HHP 4455. Clinical Teaching (I, II; 1)** This course is designed to give the student practical experience as a teacher assistant in non-major physical education classes, intramural sports or off campus school and community agencies. Open to HHP majors only. Prerequisites: HHP 2255, HHP 3355 and skill or experience in the selected activity. HPER seniors only

HHP 4460. Organization and Administration of Physical Education and Athletics (I, II; 3) Study of policies, standards, and procedures in the organization and administration of physical education and athletic programs. Prerequisite: Professional standing.	**HHP 4462. Therapeutic Recreation Administration (II; 2)** A study of the organization and administration of therapeutic recreation services with emphasis on personnel, program, facility, and financial management (Elective).	**HHP 4463. Management of Recreation and Intramural Sports (II; 2)** A study of the organization and administration of recreation and intramural sports programs with an intensive examination of policy and procedures, financial management, program development, legal issues, and risk management.
HHP 4470. Organization and Administration of Recreation (II; 3) A study of the management of recreation agencies, facilities, personnel, finances, public relations, maintenance, and evaluation. Prerequisite: Junior or senior standing	**HHP 4471. Outdoor Education (II; 2)** A course designed to help the student to use the out-of-doors as a resource in teaching. Prerequisite: Professional standing	**HHP 4472. Legal and Financial Aspects of Sports and Recreation (II; 2)** an intensive study of the legal and financial operations of public, private, voluntary, and commercial park, recreation, and sports organizations.
HHP 4480. Health Education Method/Field Experience (I, II; 4) This course focuses on the development of various teaching and assessment methods and models for helping Adolescent and Young Adult candidates in health education develop the skills necessary to both understand and apply language arts concepts in their classrooms. The course will include a field dimension of at least 80 hours during which candidates will be assigned to work with a cooperating teacher in an appropriate setting and gain greater command of their abilities to plan, implement and evaluate students in health education. Evaluation of candidate performance will be a collaborative effort by the university instructor and the cooperating teacher using established assessment instruments. Prerequisite: Approval of program advisor	**HHP 4485. Honors Seminar in Health (I, II, III; 1)** Provides the opportunity for outstanding students to investigate a health-related problem or issue of their choosing. Formal presentation of findings required. Prerequisites: Senior standing in Health and a 3.2 or above GPA. (Elective).	**HHP 4486. Senior Problem in Recreation and Sports Administration (I; 3)** An introduction to research and problem-solving practices and procedures. A research project is Required. Prerequisite: HHP Senior standing.
HHP 4490. Field Work in Recreation (I, II, III; 10) The student will actively participate in a community or private recreation program, receiving practical experience in recreation under the supervision of the agency and the University coordinator. Prerequisite: Professional standing. One semester or 409 clock hours.	**HHP 4492. Internship in Community Health (II; 12)** The student will spend 200 clock hours in a community setting related to the major. Prerequisite: Professional standing.	**HHP 4494. HHP Capstone Course (I; 3)** A review course to prepare students for the senior assessment in health, physical education, and recreation. Praxis II and Praxis III.

HISTORY

HIS 1100. Ohio History (Odd years - I; 3) A general survey of state history with emphasis on social, economic, religious, and political development from colonial times to the present as 231 well as the role and contribution of African and Native peoples. Recommended especially for elementary and secondary teachers who plan to teach in Ohio and for American History majors.	**HIS 1110. Introductory History of Africans in the U.S. (I, II; 3)** A general history survey of people of African descent in North America, covering such topics as slavery, the abolitionist movement, reconstruction and the rise of segregationist laws, the Harlem Renaissance, and the movement for human and democratic rights. The unique experience of people of African descent in America and its affinity with the main themes of North American history will be emphasized. Prerequisite: ENG 1100 or ENG 1101.	**HIS 1121. Global History to 1500 (I, II; 3)** Beginning with the emergence of humanity in Africa, this course will deal with trends in the development of human culture in China, India, the Middle East, Europe, Africa, and the Americas. Each of these regions will be examined in their efforts to build systems of government, religion, and national unity. Interactions among these regions will be examined from the standpoint of trade, war, empire, and scientific and technological exchange. Prerequisite: ENG 1100 or ENG 1101.Equivalent to TAG OHS041 (Combination of HIS 1121 and HIS 1122 equals TAG OHS009).
HIS 1122. Global History Since 1500 (I, II; 3) Efforts to build centralized states in Western Hemispheric, African, European, and Asian cultures will be examined. Trade and exploration leading to Europe's rise to worldwide hegemony will be examined from the standpoint of the impact on Native, African, and Asian cultures resulting in slavery, colonialism, and world war, concluding with the Cold War and independence struggles in the 20th Century. Prerequisite: ENG 1100 or ENG 1101. Equivalent to TAG OHS042. (Combination of HIS 1121 and HIS 1122 equals OHS009).	**HIS 2100. Historiography and Historical Research Methods (I; 3 –On Demand)** Research Methods History 2100 is an introduction to the study and discipline of history. As such, this course focuses on the philosophy, methodology, and practice of history as an academic discipline, with an emphasis on the diversity of modern historiography, the problem of objectivity, and the professional standards of historical scholarship. The ultimate goal is to prepare the student for success as a student and professional in the field of history. Prerequisites: ENG 1102; HIS 1110, HIS 1121 or HIS 1122 or permission of the instructor .	**HIS 2201. History of the U.S. To 1877 (I; 3)** The origins of society in North America will be examined with emphasis on themes such as slavery, native removal, regional economic growth and development, national formation, independence, compromise, expansion, sectional conflict, international war and conflict, African and native American resistance and war, and finally civil war and reconstruction. Prerequisites: ENG 1102; HIS 1110, HIS 1121 or HIS 1122 or permission of the instructor . Equivalent to TAG OHS043.
HIS 2202. History of the U.S. Since 1877 (II; 3) This course will study the growth of big business, western and imperial expansion, the growth of the social reform movements, movements for human and democratic rights, the depression, both World Wars, and the emergence of the Cold War as the United States becomes a dominant world power in the mid-20th century. Prerequisites: ENG 1102; HIS 1110, HIS 1121 or HIS 1122 or permission of the instructor. Equivalent to TAG OHS044.	**HIS 2245. Introduction to African Civilizations (I; 3- Odd Years)** This course provides an introduction into the classical civilizations of Africa, beginning with the origins of humanity, to the development of Ancient Egypt (Kemet), Nubia, and Kush, as well an exploration of the Great Kingdoms of Central and Western Africa. Africa's social spiritual, cultural, and political development will be examined in detail, as well as the maintenance of cultural continuity with the migration of African people. Key individuals and events will also be discussed.	**HIS 2280. History of Asia (I; 3- Odd Years)** This course is a general survey of the history of Asia from its ancient origins to the present. As the largest and most populous continent with more than 60% of the population on earth, Asia is home to three great ancient civilizations: Mesopotamia, Indus, and China; and to such dynamic economies of the world today as China, Japan, and India. This course traces the progress of Asian civilization from ancient to modern times in four major regions: East, South, West, and Southeast, with special emphasis 232 on their encounters with the West, and on their struggles and triumphs for development and modernization.
HIS 3270. Pan African History (II; 3- Odd Years) This interdisciplinary exploration of African Diaspora history is guided by	**HIS 3301. African American History To 1877 (I; 3-Even Years)** This course is a history of the struggle and contributions	**HIS 3302. African American History Since 1877 (II; 3 – Even Years)** This course is a history of the struggle and

the Black/Africana Studies discipline and Afrocentricity, which uses a varied of disciplines to better understand the dynamics of African cultural integrity. Histories, documentaries, independent research, and discussions will be used to explore relationships between Africans and African descendant populations. Disciplinary tools used in this course include the History, Africana Studies, Political Science, Geography, Linguistics and Arts.	of Africans in North America from the period of European colonial settlement to the end of Reconstruction in 1877. This course will examine issues such as early African resistance, rebellion, and war; the realities of enslavement, abolitionism, the debates between Douglass and Delany, the Black Convention Movement, the Underground Railroad, the African Colonization Society, the Civil War, and Reconstruction. Prerequisites: HIS 1110 or permission of the instructor	contributions of Africans in the North America from the post-Reconstruction period to the present. This course will examine such issues as segregation, anti-lynching campaigns, Africans in World Wars I and II, Korea and Vietnam, the Harlem Renaissance, school desegregation, and struggles for human and civil rights in the 1960s and beyond. In addition, the ideas of Booker T. Washington, Marcus Garvey, W.E.B. DuBois, Martin Luther King, Jr., and Malcolm X will be examined. Prerequisites: HIS 1110 or permission of the instructor.
HIS 3311. American Diplomatic History I (On Demand - Odd Years) This course examines the history of American foreign relations and follows the development of diplomacy in its international and domestic contexts from the colonial era to the aftermath of World War I. Topics covered include: the problems of organizing a new nation, expansion in North America and beyond, the impact of racism, war, and revolution, the rise to world powers, as well as consideration of the economic, political, and social imperatives behind foreign policy making. This course is open for nonmajors. Prerequisite: HIS 2201 or HIS 2202 or Instructor's permission	**HIS 3312. American Diplomatic History II (On Demand - Odd Years)** This course examines the history of American foreign relations and follows the development of diplomacy in its international and domestic contexts from the aftermath of World War I to the present. This course is open for non-majors. Prerequisite: HIS 2201 or HIS 2202 or Instructor's permission.	**HIS 3320. History of Europe To 1500 (I; 3)** A study of the history of Europe from Greece to the beginnings of the Italian Renaissance. Prerequisites: HIS 1121.
HIS 3321. History of Europe Since 1500 (II; 3) A study of the history of Europe from the Renaissance to the present. European modern state formation, the expansion of its colonial empires, its involvement in both World Wars, and its decline as the dominant force in global politics will be examined. Prerequisites: HIS 1122.	**HIS 3330. History of Modern China & Japan (II; 3- Odd Years)** This is a specialized upper-level history course, covering modern China and Japan from feudal imperial empires to economic powerhouses is a critical link in modern global history, and vital to an explicit understanding of today's increasingly globalized and interconnected world. This course explores China and Japan's encounters with the West and their struggles for modernization; their differing paths to communism and militarism; and the "miracles" of their rapid postwar economic development.	**HIS 3355. Community Participation (II; 3)** Affords the student an opportunity to utilize the theory of the classroom in a practical community activity, such as research, data collection, and public relation activities. Students will conduct local history research as well as perform community service in the African American museum. Prerequisites: HIS 1110, HIS 2201 and HIS 2202, or permission of the instructor
HIS 3360. Oral History Seminar (I; 3) Students will master the techniques and methodology of conducting oral history interviews as well as develop a clear understanding of the life experiences and memories of an earlier generation. Prerequisites: HIS 1110, HIS 2201, HIS 2202, HIS 1121, and HIS 1122.	**HIS 3370. History of the Black Woman (I; 3)** This course is designed to present an overview of the History of the Black Woman across the Diaspora, from Africa to the United States and the Caribbean. This course will examine the particulars of the life of the Black Woman, from exploring her role in traditional African	**HIS 3455. Colonial Latin America (II; 3)** An examination of the transfer of Iberian culture and structures to the Western Hemisphere resulting in the colonial clash of Native, African, and European cultures. The effects of colonialism on native cultures, the European controlled slave trade, and the nature and

	culture, to understanding her experience under enslavement, to her activism during Reconstruction, Civil Rights, and Black Power Eras. Of particular importance will be the intersecting dynamics of her roles as leader, worker, wife, and mother. Key individuals will be explored in detail. Prerequisites: HIS 1110 or permission of the instructor.	organization of colonial society under Spanish and Portuguese rule will be examined. Prerequisites: HIS 1121 or HIS 1122.
HIS 3460. Islam in Africa (II; 3) Islam now plays an increasing important role in shaping African societies. This course examines how Islam spread chiefly into the Western, Sudanic, Northern, and Eastern, including the coastal, regions of Africa. It focuses on the processes of adoption, adaption, and transformation as these affected indigenous African societies as well as peninsular Islamic standards and practices. The role of Islam in the state formation and nation-building, the varieties of contemporary African political Islam, and sectarian issues, among other topics, also will be studied. Prerequisite: HIS 1121 or HIS 1122.	**HIS 3550. Museum Studies (II; 3)** This course provides mentorship experiences designed to introduce students to the basics of museum operation with four focus areas: • Museum administration • Collections care and management • Exhibitions • Museum education and programming In the United States and other parts of the world, museums have become significant and enduring institutions. According to a recent estimate, over 30,000 museums exist in the United States and Canada, and they attract over 70 million visitors annually. Although this course will deal with museums in general, it will use the National Afro American Museum and Cultural Center as a resource and practice facility. In this program students will learn how museum professionals catalog, research, exhibit and interpret the holdings of a museum for the benefit of a community. Students will gain experience through the development of independent projects and will have the opportunity to visit local historical sites and museums to study how these agencies carry out their mandated duties. Prerequisites: HIS 1121, HIS 1122, HIS 2201, and HIS 2202.	**HIS 3560. Archival Studies (I; 3)** The course introduces students to the theories and principles that guide archivists, including the use of archival records, their management, physical storage, organization, and preservation. In addition, students will gain introductory experience working directly with archival material. Students will also become acquainted with professionals and professional opportunities in related fields. Prerequisites: HIS 2100, HIS 1121, HIS 1122, HIS 2201, and HIS 2202.
HIS 4370. Recent America: 1900-1941 (I; 3) A detailed study of the domestic issues from the turn of the twentieth century to the economic depression of the 1930s as well as the involvement of the nation in World War I. Prerequisites: HIS 2202.	**HIS 4371. Recent America: 1941-Present (II; 3)** A study of World War II, the Cold War, the politics of protest and social reform, America's involvement in Vietnam, and the assumption of the role of America as a super-power. Prerequisites: HIS 2202.	**HIS 4420. Africa Before 1885 (I; 3- Odd Years)** This course examines Africa's sociopolitical development from an African centered perspective. In particular, the course will examine the nature of oral history vs. written history, the concept of nation-state vs. acephalous societies, African democracy, communal organization, and Africa's economic structures. The destabilization of African 234 nations resulting from European conquest and slaving will be explored within the context of its impact upon Africa. The course will also analyze the impact of European cultural forms on the continent and the beginnings of

		European colonialism. Prerequisite: HIS 2245 or permission of instructor.
HIS 4430. Africa After 1885 (II; 3- Odd Years) This course examines the impact of the Berlin Conference and the beginnings of colonialism upon the continent of Africa. The changes to traditional African socio-political, cultural, and economic forms due to the force of European culture will be analyzed in detail. Africa's participation in the two World Wars, Africa's liberation movements, and the beginnings of Pan-Africanism will also be explored. Africa's integration into the global economy via the continued policies of Neo-Colonialism will be researched in depth. Finally, the course will study the impact of the Cold War in the creation of the modern African nation-state, as well as examine the dynamics of Africa's political process. Prerequisites: HIS 2245 or permission of instructor.	**HIS 4497. Special Topics in History (Even Years/On Demand - II; 3)** Topics in this course will vary. Instructors will have an opportunity to teach topics that they are currently researching or topics of special interest to them. Prerequisites: HIS 1121; HIS 1122; HIS 2201; and HIS 2202;or permission of the instructor.	**HIS 4640. Islamic History To 1798 (I; 3)** This course explores the history and culture of the Arab and Muslim peoples in the Middle East including the Maghrib from the late 6th century to Napoleon Bonaparte's invasion of Egypt in 1798. Throughout this course, emphasis is placed on the interrelations of socio-economic structures and intellectual developments in Islamic theology and Sharia law. The historical emergence of Islam, its maturation in the Classical Age, the consolidation of imperial states under Islam, and the decline of the Islamic Middle East and the Maghrib to the end of the eighteenth century are the major areas of focus in this course. Prerequisite: HIS 1121 or HIS 1122.
HIS 4650. Modern Middle East History (II; 3) This course takes an interdisciplinary approach to the major problems of the Muslim Middle East in the modern period. It focuses on internal Arab and Muslim social, intellectual, and economic developments. Muslim responses to European colonialism including the debate on westernization and/or versus modernization, modern Arab and Muslim nationalisms, major political trends since independence, and Islamic reformist and Islamic revivalist movements are among the chief topics emphasized in this course. Prerequisite: HIS 1122.	**HIS 4995. Global History Capstone Seminar (On demand - II; 3)** This is the history major's capstone course. Students will be required to develop a senior thesis from their specialty area with a global focus that will pull together knowledge and skills from both the core and elective areas of the major. Prerequisite: Completion of the history major or permission of the instructor.	

HONORS

HON 3300. Honors Colloquium (I, II; 3) The colloquium is designed for advanced Honors Scholars and other qualified students with strong research, writing, and documentation skills. Through rigorous discussion guided by instructors, students will explore a topic in depth from an interdisciplinary perspective. Students will formulate their hypotheses and discoveries and share them with fellow students, faculty, and the University community. The colloquium is	**HON 3310. Research and Information (I, II; 1)** This course is a weekly, 1-credit study concentrating on research methods, presentation and documentation. Students preparing for the Honors Thesis requirement are directed to this course.	**HON 4400. Honors Thesis/Project (II; 3)** To fulfill Honors Program requirements, honors students must complete an honors thesis or project in the major field in the senior year.

reading-intensive and facilitates growth in oral and written communication skills. Themes may vary from semester to semester. Prerequisite: ENG 1102 or the equivalent.		

HOSPITALITY MANAGEMENT

HMP 1100. Introduction to Hospitality Management (I, II; 3) This course explores and analyzes the management functions, methods, and concepts in various segments of the hospitality industry. An overview of management careers, opportunities, and responsibilities in the hospitality industry will be presented.	**HMP 2211. Hospitality Internship I (I, II; 1)** Students will be required to work in various areas of the industry for a minimum of 100 hours. An oral or written presentation before faculty, students or industry personnel is required to complete this phase of the internship. Report covers information required by the internship manual. Prerequisite: Permission of the instructor.	**HMP 2220. Sanitation (II; 3)** Course examines the causes and prevention of food poisoning and food borne illness including the current problems facing the industry. Proper sanitation practices, hygiene and a study of health regulations and inspections are also studied. Prerequisite: HMP 1100.
HMP 2222. Food Production (II; 3) Course introduces students to basic food service preparation. Emphasis is placed on management concepts, menu planning and preparation supervision. Students learn service techniques, handle problems in customer relations, and keep accurate accounting records on the profit and loss phases of the operation. Staffing, merchandising, and cost control procedures are integral parts of the course	**HMP 2250. Culinary Arts (II; 3)** This course in advanced food production and service techniques is designed to provide the student with realistic production, service and managerial experience. Students will be rotated through production and service areas. Prerequisites: HMP 2220 and 2222.	**HMP 3310. Hospitality Law (I; 3)** Course covers basic laws that affect hotels, motels, and restaurants, with common law used as a basis. The student is introduced to the fundamental laws, rules, and regulations applicable to the hospitality industry. Prerequisite: HMP 1100.
HMP 3311. Hospitality Internship (I, II; 2) Students will be required to work in various areas of the industry for a minimum of 200 hours. An oral or written presentation before faculty, students, or industry personnel is required at the completion of this phase of the internship. Report covers information as requested in the internship manual. Prerequisite: Permission of the instructor.	**HMP 3330. Hotel Management (II; 3)** This course explores the duties of hotel management including front desk operations and property and room management. Prerequisite: HMP 1100.	**HMP 3331. Hospitality Operations Management (II; 3)** Course explores management systems, methods and procedures related to the operation of food service. Course includes the study of the management tools available to control sales and expenses within the hospitality operations. Also examined are fundamentals of food and beverage cost controls for hotel and restaurant operations. Prerequisite: HMP 1100.
HMP 4401. Tourism (I; 3) This course focuses on the understanding of tourism from the perspectives of travelers and destinations, while identifying tourism's economic, sociocultural, and environmental impacts on communities. Prerequisite: HMP 1100.	**HMP 4402. Hospitality Marketing (II; 3)** Course examines the marketing principles, theories and concepts used to maximize profits in hospitality organizations. During this course, students will analyze methods used by sales and service departments with emphasis on selling, planning and marketing. Prerequisite: HMP 1100.	**HMP 4411. Hospitality Internship (I, II; 3)** Students will be required to work in various areas of the industry for a minimum of 300 hours. An oral or written presentation before faculty, students, or industry personnel is required at the completion of this phase of the internship. Report covers information as requested in the internship manual. Prerequisite: Permission of the instructor

HMP 4412. Hospitality Ethics (II; 3) This course exams the managerial decision-making process within hospitality organizations. Ethical cases for review include workers' rights, consumers' rights, managerial response, community obligation and social responsibility. Prerequisite: HMP 1100.	**HMP 4418. Franchising (I; 3)** This course studies franchise administration, operations, and marketing, with special emphasis on hospitality related franchises. The legal regulations of franchises, the franchisee/franchisor relationship, and unique problems in franchise operations are included. Prerequisite: HMP 1100.	**HMP 4426. Club and Casino Management (II; 3)** Students are exposed to organizations, administration, operation, and opportunities within the casino and private club industry, with 236 emphasis on the manager's duties. Prerequisite: HMP 1100
HMP 4436. Seminar in Hospitality Management (II; 3) Hospitality management topics are discussed with a major emphasis on operations management. Prerequisite: Junior standing.	**HMP 4439. Risk and Quality Management for Hospitality (I; 3)** This course is designed to enhance the student's ability to obtain and maintain a quality focus, and reinforces the concept that a risk and quality management program impacts customers and involves all levels of an organization. Prerequisites: HMP 1100.	**HMP 4466. Internship in Hospitality Management (On Demand: 1-6)** Course provides the opportunity to explore practical experience in hospitality management. Student activities will be supervised by the organization sponsoring the internship. The Office of Career Services and the responsible faculty monitor internship. A comprehensive report is required at the completion of the internship. Prerequisite: Permission of the instructor.

INDUSTRIAL TECHNOLOGY

INT 1110. Engineering Print Reading (I; 3) Prepares the student to read, understand and use blueprints with confidence; provides instruction in basic definitions, symbols, rules and concepts of GD and T as they relate to work holding, assemblies, tolerance zones, limits of size, datums, target, and feature control frame; reviews 13 basic geometric characteristics (flatness, straightness, circularity, cylindricity, profile of a line and surface, perpendicularity, angularity, parallelism, position, concentricity, and circular and total run out) and their associated symbolism as defined in ANSI Y14.5M specifications. Two lectures and two laboratory/group project periods per week.	**INT 1210. Engineering Computer Graphics (I, II; 3)** Graphics and modeling fundamentals for engineering design: multi view projections, auxiliary views, GD and T, computer modeling of solid geometry, generation of engineering drawings, and assemblies. Introduction to reverse engineering, computer aided design, and manufacturing. Individual and team projects will be used to explore application of the design process and problem. solving. One lecture and four laboratory periods per week. Equivalent to TAG OET012.	**INT 2210. Semiconductor Device Physics (I, II, On-demand; 3)** This course covers the fundamental concepts of electronic devices, including semiconductor materials, p/n junctions, Schottky barriers, and various types of transistors, such as bipolar junction transistors and metal-oxide-semiconductor field-effect transistors. Additionally, it covers other topics like light emitters, photodetectors, and solar cells. This course provides students with a broad understanding of advanced electronics, photonics, and integrated circuit design.

INT 2311. Circuit Analysis I (I; 3) Basic circuit and troubleshooting techniques for DC circuits with emphasis on industrial applications. Topics include the concepts of resistance, inductance, capacitance, power, nodal and mesh analysis, network theorem, RL, RC, and RCL analyses, and applications of operational amplifiers. Conventional and computer analysis techniques are utilized. Two lecture hours and two laboratory hours per week. Prerequisite: MTH 1750.	**INT 2312. Circuit Analysis II (II; 3)** Basic circuit and troubleshooting techniques for AC circuits with emphasis on industrial applications. Topics include the concepts of resistance, inductance, capacitance, power, nodal and mesh analysis, network theorem, RL, RC, and RCL analyses, and applications of operational amplifiers. Conventional and computer analysis techniques are utilized. Complex frequency, complex power, resonance, and polyphase systems are also discussed. Two lecture hours and two laboratory hours per week. Prerequisite: INT 2311 and MTH 2501. Equivalent to TAG OET003.	**INT 2320. Advanced 3-D Modeling (I; 3)** Designed to provide advanced CAD users with in-depth knowledge and required skills as related to constructing and integrating 3-D solid modeling and surface generation to part models, assembly, and animation. Commercial CAD modeling packages will used. One lecture and four laboratory periods per week. Prerequisite: INT 1210. Equivalent to TAG OET021
INT 2340. Statistical Process Control for Semiconductors (I, II, III; 3) Introducing the subject of statistical process control for semiconductors manufacturing. The course includes important qualitative definitions and quantitative procedures for process improvements, quality assurance, and quality control within the context of the semiconductors industry. The course covers the fundamentals of statistical process control methods, such as probability and statistical process modeling, designing and using process control charts for offline and online quality control, experimental design, acceptance sampling methods, and process standardizations.	**INT 2410. Industrial Safety and Health (II; 3)** Covers issues and problems commonly associated with OSHA in the workplace. Work place settings considered will be manufacturing, industrial, or office. The impact of human and ergonomic factors on safety design will be explored. Safety rules and regulations, management responsibilities, and roles of safety and health personnel will be considered as part of an integrated safety management system. Three lectures per week.	**INT 2420. Industrial Instrumentation and Process Control (II; 3)** A study of industrial control systems as applied to process control and positioning systems. Application of transducers in mechanical, fluid, and electrical measurements. Study of 237 transducers, recorders, indicators, controllers, and statistical analysis of data. Control topics include the application of sensors, actuators and servo controllers in industrial processes. Two lectures and two laboratory periods per week. Prerequisite: INT 2310.

INT 2430. Electronic Devices and Circuits (II; 4) A study of semiconductor properties, transistor and analog integrated circuit based circuits analysis and design. Topics include concepts of semiconductors, BJT, FET, and JFET. CMOS based circuits, negative and positive feedback and applications. Thyristors and power supplies and applications of commercially available analog integrated circuits. Digital circuits are introduced. Three lecture hours and two laboratory hours per week.	**NT 2440. Circuit Analysis II (I; 3)** Basic circuit and troubleshooting techniques for AC circuits with emphasis on industrial applications. Topics include the concepts of resistance, inductance, capacitance, power, nodal and mesh analysis, network theorem, RL, RC, and RCL analyses, and applications of operational amplifiers. Conventional and computer analysis techniques are utilized. Two lecture hours and two laboratory hours per week. Prerequisite: MTH 2501 and INT 2310.	**INT 2450. Seminar in Commercial Construction (II; 3)** Covers individual investigations into present and future trends related to commercial construction projects. Guest lecturers including engineers, project managers, and contractors will discuss present and future trends based on their multiple years of experience. Some site visits will be required. Three lecturers per week. Prerequisite: INT 2330.

Prerequisite: INT 2310. . Equivalent to TAG OET005.		
INT 2460 Applied Statics: (II; 3) This course covers static force vectors, and combining forces into a resultant. Computation of moments and couples. Evaluation of system of forces and moments. Static equilibrium applied to members in a truss, frame and pulley. Application of friction to wedges and inclines. Also center of gravity, centroids, and moments of inertia will be introduced. Two lectures and two laboratory periods per week. Prerequisite: MTH 2501. Equivalent to TAG OET007.	**INT 2470. Robotics and Automation (I, II, III, On-demand; 3)** The "Robotics and Automation" course will provide the student with basic terminology, theory, and application of automation and robotics systems and Industry 4.0 technologies. Topics covered will include the selection, construction, and classification of robots and automation equipment, as well as safety considerations, artificial intelligence, and vision systems.	**INT/AGR 3120. Agriculture Machines and Mechanization (I; 4)** This course introduces students to mechanization in agriculture which involves selection, basic design, operation, maintenance and management of machinery and power systems typically used in the agriculture field operations and in production. The course also provides an overview of precision agriculture and sensors, GPS and real time kinematic GPS, remote sensing technologies, and computer guided delivery systems for precise and targeted delivery of irrigation water, fertilizers, and pesticides. Course in particular introduces agricultural power and machinery (engines, power transmissions including hydraulics, tillage machinery, calibrations, and harvesting machines), agricultural mechanization for improved agricultural materials handling, pest control applications, agricultural electrification including (circuits, motors, controls) and agricultural structures plans and constructions. Three hour lecture and two lab contact hours per week. Prerequisite: INT 1210, AGR 1150, AGR 1250 and MTH 2501
INT 3510. Materials and Machine Processes (I; 3) Covers identification of metals, characteristics, and working qualities of common industrial materials along with the precision measurement, machine tools and metal working processes which include turning, drilling, milling, electric discharge machining and grinding. Two lectures and two laboratory periods per week. Prerequisite: INT 1110.	**INT 3520. Digital Systems (I; 4)** An introductory course on the basic tools for the analysis and troubleshooting of combinational and sequential logic as employed in digital computers and control systems. Topics include number systems, Boolean algebra, logic gates, combinational elements and circuits, synchronous sequential circuits, memory and storage devices, programmable logic devices. Three lecture hours and two laboratory hours per week. Prerequisite: INT 2430. Equivalent to TAG OET002	**INT 3530. Quality Control and Experimental Design (SPC/DOE) (I; 3)** Introduces the fundamentals of statistical quality control of variables and attributes data. Emphasis is placed on hands-on construction of control charts and the interpretation of various control charts patterns relevant in industry for part and assembly quality and for various manufacturing processes. The course also introduces the 238 fundamentals of designing valid experiments supporting sound statistical inferences with emphasis on full

		factorial designs, fractional factorial designs and the Taguchi screening designs as utilized in industrial applications. Two lectures and two laboratory periods per week. Prerequisite: MTH 2001.

INT 3540. Programmable Logic Controllers (I; 3) Introduction to the installation and application of programmable logic controllers in industry. Topics include ladder logic, input-outputs, timers and interrupts, sequencing and programming, and installation and interfacing techniques. Two lecture hours and two laboratory periods per week. Prerequisites: INT2310 and INT 2420.	**INT 3550. Applied Strength of Materials (I; 3)** Analyze stress, strain in a member carrying tensile or compressive loads. Compute shear stress, torsional shear stress and combined loadings in beams. Determine stress concentration in members. Study deflection of beams due to a variety of loading and support. Two lecture periods and two laboratory periods per week. Prerequisite: INT 2460. . Equivalent to TAG OET008.	**INT 3610. Plastics Technology (II; 3)** This course involves the study of plastics materials and manufacturing processes, including coverage of thermosetting and thermoforming material properties and applications. Emphasis is placed on common industrial processes including injection molding, extrusion, blow molding, and thermoforming. Two lectures and two laboratory periods per week. Prerequisite: MFE 1110
INT 3620. Computer Numerical Control (II; 3) Covers manual programming as well as CAM programming for both CNC mills and lathes. Emphasis is placed on understanding standard G-codes, controllers, tool selection, tool length offsets, cutter diameter compensations, canned cycles and fixturing. Projects will make extensive use of laboratory facilities. One lecture and four laboratory periods per week. Prerequisite: INT 3510.	**INT 3630. Microprocessors (II; 4)** Introduction to the applications and development of software and hardware for effective use in interfacing microprocessor-based systems. Software topics include software architecture, software development tools and assembly language programming. Hardware topics include microprocessor architecture, bus timing and structure, memory, input-output ports interfacing, Interrupt handling, clock generation and timing. Three lecture hours and two laboratory hours per week. Prerequisite: INT 3520. Equivalent to TAG OET004.	**INT 3650. Surveying (On Demand; 3)** Course will cover the fundamental use of laser levels, transits, and GIS systems. Emphasis will be placed on linear measurements angular measurements, extending straight lines, profile leveling, and the keeping of surveyor's data and notes. Lecture two hours, laboratory two hours. Perquisites: MTH 2500 or above

INT 4220 VLSI (Very Large Scale Integrated) Systems Design and Fabrication (I, II, III, On-demand; 3) Enables the design and analysis of full custom integrated digital systems, incorporated into a VLSI chip deploying design strategies for low power and high performance; in the context of small group design team. Students will design and create components packaged into a full custom chip implemented in a clean room class 1000 or 100 particles per cubic meter environment. Hands-on experience in the operation of a microfabrication laboratory will be provided. Encapsulation of design experience will be assessed through a detailed report and a short presentation to the class. Prerequisite: INT2xxx: Semiconductor Device Physics.	**INT 4230. Manufacturing Science and Enterprise Resource Planning (I, II, III, On-demand; 3)** Imparts the knowledge threads and competencies needed to outpace both change and the competition and enforce the development and implementation of next-generation advanced manufacturing sciences & technologies and supply chain best practices, through a culture of creativity, innovation, cost reduction, quality and safety enhancement, backed by research and scale-up introduction of new processes and products. The course teaches the skills needed to plan the resources of the enterprise to enable new materials, methods, systems, products, and processes to be realized. Emphasis is placed on the core fundamentals of effectively managing the organization's local and global supply chain logistics: to get the right product, at the right time, in the right place, in the right quantity, in the right condition, at the right price, to the right customer using the right array of enabling hardware and software advanced technologies. Prerequisite: INT 2220: Statistical Process Control for Semiconductors.	**INT 4710. Manufacturing Processes (I; 3)** This course covers heat treating, properties of materials, forming and joining, and casting, as well as emphasizing measuring devices and fixturing. Numerous outside assignments and field trips will be required. Two lectures and two laboratory periods per week. Prerequisite: INT 3620. . Equivalent to TAG OET010.
INT 4720. Communication Systems (I; 3) A study of modulation techniques for transmission of electromagnetic energy. Topics include modulation and demodulation techniques, transmitters and receivers, and applications in telecommunication systems. Two lectures and two laboratory periods per week. Prerequisite: INT 3630.	**INT 4730. CAD/CAM/CAE (I; 3)** A study of integrating 3-D CAD/CAM/CAE into designing, planning, and manufacturing. 3- D parts will be created and then analyzed using FEA software for computation of stress and strain of components under different loadings. Using FEA tools, the part design will be evaluated, modified or optimized. After finalizing the part design, parts will be sent to CAM packages for programming and manufacturing using CNC machines. Two lectures and two laboratory periods per week. Prerequisite: INT 3620.	**INT 4740. Plant Layout and Material Handling (I; 3)** Provides students with a broad understanding of the issues involved in layout planning and design and the material operation factors in an industrial production system. Topics include plant location, site planning and techniques for layout of plants and their optimization, plant rate determination, process design, equipment selection, auxiliary storage facilities, plant assembly 239 line balancing, materials handling principles and equipment, and the impact of computerization on practice. A course design project pooling all the information presented in class will be provided. Field trip to a material handling organization is required. Two lectures and two laboratory/recitation periods per week. Prerequisite: INT 1210.
INT 4795. Senior Design Capstone I (I; 2) A compilation of all previous course	**INT 4810. Machine Design (II; 3)** Covers the fundamentals of design of	**INT 4895. Senior Design Capstone II (II; 2)** This course is a continuation of INT 4795. Emphasis is placed on

work, and strongly emphasizes a teamwork environment. It includes extensive use of CAD/CAM/ CAE packages to arrive at a design methodology for product design. Technical reports and presentations of all work are required. One lecture and two laboratory periods per week. Prerequisite: Senior standing	mechanical components and systems as used in diverse industrial applications. Introduction to design concepts, design safety and ethics, design for strength, and design for rigidity as applied to components of machines and mechanical systems. Examples of components include shafts, beams, bearings, springs, gears, belt drives, couplings and brakes. A design project will be assigned to students to apply the concepts and knowledge learned throughout the course. Lecture two hours, laboratory two hours per week. Prerequisite: INT 3550.	Industrial Partners design and testing requirements to be determined at the start of each course. Technical reports and presentations of all work will be required. One lecture and two laboratory periods per week. Prerequisite: INT 4795.

INTERDISCIPLINARY STUDIES

IDS 1400. Introduction to Environmental Humanities (I, II; 3) This course will engage with key, contemporary, and foundational environmental challenges through the various lenses of the Humanities. We will explore foundational issues in climatology, environmental justice, multicultural environmentalism, ecofeminism, environmental psychology, environmental materialities and textualities, Traditional Ecological Knowledge, environmental communication and information management, political ecologies, and related topics. *Prerequisite: ENG 1102 is equivalent.*	**IDS 1500. Introduction to Gender and Sexuality Studies (I, II; 3)** This course provides a comprehensive overview of gender and sexuality studies. Coursework focuses on historical and political movements related to the rights of women and the LGBT community and consider how these movements have led to academic studies of gender and sexuality. Students develop a vocabulary for speaking and writing about feminist issues, queer theory, and related theoretical concepts.	**IDS 1600. Introduction to Disability Studies (On-demand; 3)** This course will focus on the meaning of disability and its history within the United States. The course will explore the concepts and definitions surrounding disability and its depiction in history, literature, public attitudes, law and policies, and culture. The course will also chart the use of disabilities to create or reinforce stereotypes in race, ethnicity, class, gender, and sexual orientation.

IDS 2100. Introduction to Studies in Humanities (I, II; 3) This course is an introduction to concepts and methods of interdisciplinary study in the field of Humanities. Includes the study of social and cultural issues from a variety of perspectives. Students will gain an understanding of how using multiple fields of study develops a deeper knowledge of societal issues. Students will develop an educational plan for the interdisciplinary degree. Prerequisite: ENG 1100 or ENG 1101.	**IDS 2300. Global Perspectives (I, II; 3)** This course is intended to broaden and deepen the student's understanding of various subject areas, and from multiple interlocking perspectives. Through readings in the disciplines, such as, but not limited to, history, culture, politics, science, social science, education, economics, and technology, the course provides students with the knowledge and critical-thinking skills to participate substantively in global conversations. Taught by faculty from all CSU colleges.	**IDS 3105. Queer Studies (On-demand; 3)** This course examines concepts in the interdisciplinary field of queer studies with an emphasis on the intersections of sexuality with race, class, nationality, and ability. Students will learn about the fields of queer theory and queer of color critique and use queer theory as a lens for analyzing cultural ideas of what is considered "normal." Prerequisite: IDS 1500.

IDS 3100. Feminisms (On-demand; 3) This course will provide an overview of the different frameworks within feminist theory and their evolution over the last two hundred years. In asking, "What is feminism?", this course will explore concepts and debates in the field of feminism as they relate to issues of gender, sexuality, identity, and power from a variety of feminist theoretical perspectives. Prerequisite: IDS 1500/Intro to Gender and Sexuality Studies	**IDS 4300. Special Topics in Africana Studies (On-demand, 3)** Topics in this course will vary. Instructors will have an opportunity to teach topics within Africana Studies that they are currently researching or topics of special interest to them. *Prerequisite: AFS 1200; or permission of instructor*	**IDS 4100. Please confirm Special Topics in Environmental Humanities (On Demand; 3)** Topics in this course will vary. Instructors will have an opportunity to teach topics within Environmental Humanities that they are currently researching or topics of special interest to them. *Prerequisite: IDS 2100; or permission of instructor*
IDS 4200. Please confirm Special Topics in Gender and Sexuality Studies (On Demand; 3) Topics in this course will vary. Instructors will have an opportunity to teach topics in Gender and Sexuality Studies that they are currently researching or topics of special interest to them. *Prerequisite: IDS 2100; or permission of instructor*	**IDS 4500. Senior Capstone in Humanities (II, 3)** This course is a comprehensive assessment of student knowledge and work in the field of interdisciplinary studies. Students will complete a senior thesis, project or portfolio that demonstrates mastery of material acquired as an Interdisciplinary Studies Major. The course explores issues in professional development, including career opportunities and graduate school studies within the major. Prerequisites: Senior class standing and completion of COM 2206, ENG 3100, HIS 2100, or PHI 3500.	

INTERNATIONAL LANGUAGES AND CULTURES

ILC 1100. Topics in Foreign Languages (On demand; 1-5) A special interest section of Spanish, French, or Swahili, or an introductory course in a language not included in the catalog. Topics vary from semester to semester. May be repeated	**ILC 1131. Beginning Spanish I (I; 4**) Introduction to beginning Spanish language structure: noun/adjective agreement, verb conjugations in present tense, selected irregular present tense verbs, ser/estar,	**ILC 1132. Beginning Spanish II (II; 4)** Continuation and completion of beginning Spanish language structure: comparatives, relative and interrogative pronouns, compound tenses, the preterit, the imperfect tense, and

for credit. Prerequisite: Permission of instructor.	possessives, demonstratives, and reflexive verbs. Active vocabulary development to 600 words. Reading vocabulary developed through study of cognates. Reading and translation skills with a dictionary for simple news items, advertisements, and simple prose.	enhanced constructions, Conversation around situational exercises to enhance survival communication skills, and more complex level of conversation developed around situational exercises to polish oral communication skills. Active vocabulary development to 1,200 words. Reading and translation skills for beginning level texts. At the end of the two-semester sequence, a student will (1) understand the basic grammatical structure of Spanish; (2) be able to carry out a conversation about most simple everyday topics; and (3) be able to read or translate with a dictionary Spanish prose of average difficulty. *Prerequisite: ILC 1131, its equivalent, or instructor permission.*	
ILC 1133. Spanish for Business I (On-demand; 3). This course is an introduction to Spanish for Business. It is a beginning Spanish language course designed for individuals studying or working in business careers. The course is devoted to the study of essential business vocabulary and the cultural issues related to successful interactions with Spanish-speaking clients in the business world. It introduces essential business vocabulary and presents typical everyday situations that business and accounting students, pre-professionals, and professionals may encounter at their workplace, on business travel, or while communicating with business partners abroad. Prerequisite: ILC 1132, its equivalent, or permission of the instructor.	**ILC 1134. Spanish for Business II (On-demand; 3).** This course is a continuation to Spanish for Business I. It is a beginning Spanish language course designed for individuals studying or working in business careers. The course explores the essential business vocabulary and the cultural issues related to successful interactions with Spanish-speaking clients in the business world. It introduces business vocabulary and presents typical everyday situations that business and accounting students, pre-professionals, and professionals may encounter at their workplace, on business travel, or while communicating with business partners abroad. Prerequisite: ILC 1133 and ILC 2231, their equivalent, or permission of the instructor.	**ILC 1136. Spanish for Health Care I (On-demand; 3)** A beginning Spanish language course designed for individuals studying or working in healthcare. The course covers the study of medical Spanish terminology and the cultural issues related to successful interactions with Spanish-speaking patients and their families in the clinical encounter. It introduces the vocabulary and communication skills used by medical professionals, and it describes illness and medicine as understood by many in the Spanish-speaking world. This course is suitable and applicable to potential work with Spanish-speaking patients in future/current careers in medicine, nursing, social work, translation/interpretation, or mental health settings. Prerequisite: ILC 1132, its equivalent, or permission of the	**ILC 1141. Beginning French I (I; 4)** This course is an introduction to French. It develops learners' listening, reading, speaking, and writing skills, as well as cultural knowledge of Francophone countries. Learners will become more globally competent and linguistically aware. This course is taught using a goal- based, communicative approach in which classmates interact in the target language.

		instructor.	
ILC 1142. Beginning French II (II; 4) This course offers continued study of French. It develops learners' listening, reading, speaking, and writing skills, as well as cultural knowledge of the Francophone World. Learners will become more globally competent and linguistically aware. This course is taught using a goal-based, communicative approach in which classmates interact in the target language. Prerequisite: FLA 1141, its equivalent, or instructor permission	**ILC 1151. Beginning Swahili, I (I; 4)** Introduction to Swahili. Development of basic listening, speaking, reading, and writing skills emphasizing a communicative approach. Conversation on everyday topics. Reading texts based on Swahili culture. Students will acquire a minimum core vocabulary of about 600 words and mastery of the following basic structures: Swahili noun class system; associative a; present affirmative and negative tenses; the imperative; emphatic pronouns; n i and si expressions; yes and no questions; question words; noun/adjective agreement; possessive adjectives; monosyllabic verbs; reciprocal and prepositional verbs.	**ILC 1152. Beginning Swahili II (II; 4)** Continuation and completion of work on basic listening, reading, speaking, and writing skills emphasizing a communicative approach. Conversation on everyday topics. Reading texts based on Swahili culture. Active vocabulary to increase to 1,200 words. Reinforcement of structures learned in FLA 1151 and mastery of the following new basic structures: the verb kuwa and kuwa na; object prefixes with verbs; demonstratives; -li-, -ku-, -ta-,- me-, -ja-, and -hu- tenses; reflexive, prepositional, and passive verbs; statements about place with -po, -ko, and -mo;- ka and -ki tenses; the subjunctive; the conditional – nge ;causative verbs; the -vyo of manner;	**ILC 1161. Beginning Chinese I (I; 4)** Introduction to Chinese Pinyin Romanization system and basic conversational Mandarin Chinese structures: rules of phonetic spelling, tones, and pronunciation drill; basic sentence patterns for daily use; greetings, ordering at a restaurant, asking for time and directions, etc.; introduction of Chinese characters: creation and evolution, stroke order and structure; language related Chinese culture. By the end of the course, students are expected to know the basic sound system and simple sentence structures, to be able to conduct daily conversation in simple Chinese characters (approximately 600 words).

		advanced word order. At the end of the two-semester sequence, a student will (1) understand the basic grammatical structure of Swahili; (2) be able to engage in a conversation about most simple everyday topics; and (3) be able to read or translate with a dictionary Swahili prose of average difficulty. Prerequisite: FLA 1151, its equivalent,	
ILC 1162. Beginning Chinese II (II; 4) Continuation and further development of Chinese Pinyin Romanization system and basic conversational Mandarin Chinese structures: sentence patterns that help students carry on simple conversations in Chinese on a considerable range of topics; the Chinese character writing system, sentence composition and development of language skills in listening, speaking, reading, and writing. Computer skills with Chinese programs and simplified Chinese character	**ILC 1171. Beginning Arabic I (I; 4)**. This course is an Introduction to Arabic (Modern Standard). It develops listening, reading, speaking, and writing skills, as well as cultural knowledge of Arabic speaking societies becoming more globally competent and linguistically aware. Taught using a goal-based, communicative approach in which classmates interact in the target language.	**ILC 1172. Beginning Arabic II (II; 4**).This course offers continued study of Arabic (Modern Standard). It develops listening, reading, speaking, and writing skills, as well as cultural knowledge of Arabic speaking societies becoming more globally competent and linguistically aware. Taught using a goal-based, communicative approach in which classmates interact in the target language. P*rerequisite: ILC 1171 or instructor permission.*	**ILC 1181 Beginning Russian I (I; 4)** This course is an introduction to Russian language and culture. It develops learners' listening, reading, speaking, and writing skills using a communicative approach. Learners will become more globally competent and linguistically aware.

input will also be included. By the end of this course, students are expected to have a good command of the Pinyin system, to acquire the rudimentary knowledge of Chinese writing system, to be able to			
communicate in some real-life situations in a Mandarin speaking environment, and to read and write with an active vocabulary of 250 simplified characters (approximately 1,200 words). Prerequisite: FLA 1161.	**ILC 1182 Beginning Russian II (II; 4)** This course is a continuation to Russian language and culture. It develops learners' listening, reading, speaking, and writing skills using a communicative approach. Learners will become more globally competent and linguistically aware. *Prerequisite: ILC 1181, its equivalent, or instructor permission*	**ILC 1191 Beginning Portuguese I (I; 4)** This course is an introduction to Portuguese. Focus on language and Portuguese-speaking cultures. It develops learners' listening, reading, speaking, and writing skills using a communicative approach. Learners will become more globally competent and linguistically aware.	
ILC 1192 Beginning Portuguese II (II; 4) This course is a continuation to Portuguese. Focus on language and Portuguese-speaking cultures. It develops learners' listening, reading, speaking, and writing skills using a communicative approach. Learners will become more globally competent and linguistically aware. *Prerequisite: ILC 1191, its equivalent, or instructor permission.*	**ILC 2200. Topics in International Languages and Cultures (On demand; 1- 3)** A special interest section of Spanish, French, or Swahili, or an intermediate course in a language not included in the catalog. Topics vary from semester to semester. May be repeated for credit. This course may be counted towards minors in International Languages and Cultures. *Prerequisite: Permission of instructor.*		

ILC 2222. Moroccans Through Films (I, II;3) Morocco, located in North Africa, is a country comprised of diverse, rich cultures. Morocco and Moroccans are also facing a variety of challenges and social changes. This course explores these topics using movies as windows into Moroccan cultures. This course is taught in English but watches non-English language films. In this course, students will develop their global and intercultural competence through examining the peoples of one country. These skills are critical for students planning careers (business, engineering, law, international development, etc.) involving collaboration across international borders and cultures. Assignments based on watching films, preparing provided preparatory material, peer interactions, and written assignments. By the class's conclusion, students will have produced written work, useful for career portfolios, demonstrating their global knowledge and critical thinking skills.	**ILC 2231. Intermediate Spanish (On demand; 4)** Introduction to intermediate Spanish structure with focus on traditional trouble spots: preterit vs. imperfect, pronouns, compound tenses, subjunctive, passive voice, por vs. para. Intensive application of grammar through journal writing and workbook assignments. Increase of active vocabulary to 2,000 words through readings, conversation, and assigned compositions. Prerequisites: FLA 1132 or the equivalent, entrance examination, and instructor permission	**ILC 2232. Intermediate Writing in Spanish (On demand; 4)** This course will focus on writing techniques and grammar review; literary and film analysis incorporating grammatical points. Taught in Spanish. Prerequisite: FLA 2231.
ILC 2233. Spanish Golden Age Literature in Translation (On Demand; 3) This is a reading and writing intensive course on Spanish Golden Age Literature (16th/17th Cent.). Students will become acquainted with some of the most well- known authors and literary works of Spanish Golden Age Peninsular Literature in English translation and will watch movie adaptations of some of those works. Readings include different literary genres, such as poetry, drama, novels, and short stories. Authors may include Miguel de Cervantes, Tirso de Molina, Lope de Vega, Calderon de la Barca, Ana Caro, Teresa de Avila, Maria de Zayas y Sotomayor, etc. Taught in English. Prerequisite: ENG 1100 or ENG 1101.	**ILC 2234. Spanish and Latin American Cinema (On Demand; 3)** This is a writing- intensive foreign language course on Spanish and Latin American contemporary cinema. Students will watch a series of movies and/or documentaries from several Spanish- speaking countries and different time periods. Emphasis on listening, speaking, reading, and writing; as well as on history and culture. This course will focus on writing techniques, grammar review, and film analysis. Taught in Spanish. Prerequisite: FLA 1132, its equivalent, or instructor permission.	**ILC 2241. Intermediate French (On demand; 4)** Review of basic French structure with focus on traditional trouble spots: passè composè vs. imparfait, pronouns, compound tenses, passive voice, subjunctive, relative and interrogative pronouns. Intensive application of grammar through journal writing and workbook assignments. Increase of active vocabulary to 2,000 words through readings, conversation, and assigned compositions. Prerequisites: FLA 1142 or the equivalent, entrance examination, and permission of instructor.

ILC 2242. Intermediate Writing in French (On Demand; 4) This course will focus on writing techniques and grammar review; literary and film analysis incorporating grammatical points. Taught in French. Prerequisite: FLA 2241	**ILC 2251. Intermediate Swahili (On demand; 4)** Review of basic Swahili structure with focus on traditional trouble spots: pronouns, tenses, subjunctive, statements about place, kuwa and kuwa na. Intensive application of grammar through journal writing and workbook assignments. Increase of active vocabulary to 2,000 words through readings, conversation, and assigned compositions. Prerequisites: FLA 1152 or the equivalent, entrance examination, and permission of instructor.	**ENG/ILC 2290. International Literature in Translation: Francophone African Literature (On demand; 3)** A reading and discussion course for non-majors designed to acquaint the student with selected major works by foreign language authors in translation. Emphasis on European, Latin American, and Francophone African writers. Content may change each time offered. May be repeated for credit when content changes.

ENG/ILC 2293. Hispanic American Literature in Translation (On demand; 3) An introductory reading and discussion course to acquaint students with foundational overview of Hispanic America from her encounter with Europe until her independence from Spain through selected major works by Hispanic American authors in English translation. 223 Works to be studied are written or set in colonial and postcolonial periods in Hispanic America. The course will give students the opportunity to study the selected works and to analyze and interpret them in their socio-cultural, historical, and political contexts. Prerequisite: None; Gen Ed course.	**ENG/ILC 2294. Francophone African Literature in Translation (On demand; 3)** An introductory reading and discussion course to acquaint students with selected major works by Francophone African authors in English translation. Works to be studied are written or set in pre-colonial, and postcolonial periods in Francophone Africa. The course will give students the opportunity to study the selected works and to analyze and interpret them in their socio-cultural, historical, and political contexts. Prerequisite: None; Gen Ed course.	**ENG/ILC 2295. The African Storyteller (On demand; 3)** An introductory course on traditional story-telling in Africa. African storytellers do not merely narrate stories; there is performance. The course will examine the art of the African storyteller including image, narrative technique, rhythm and symbolism. African storytelling from oral to written form will also be discussed. Students will have the opportunity to study performance and aesthetics of African oral narratives, and interpret them within their socio-cultural relevance. Prerequisite: None; Gen Ed course.
ENG/ILC 3010. African Literature. (II; 4) Studies of texts in English and English translations of texts written by the descendants of peoples indigenous to the African continent. May include oral literature, essays, poetry, fiction, and drama. Prerequisite: ENG 2200 or instructor's permission.	**ILC 3300. Topics in International Languages and Cultures: Intermediate Conversation (On demand; 1-3)** Topics vary from semester to semester. A special interest section of Spanish, French, Swahili, Chinese, Arabic or any language not included in the catalog. May be repeated for credit. This course may be applicable to the foreign language minor. *Prerequisites: ILC 2231, 2241, or equivalent or the consent of instructor.*	**ILC 3331. Literature of Spanish America (On demand; 3)** Survey course in the literature of Mexico, Central America, South America, and the Spanish Caribbean. Readings include selections from pre-Columbian, colonial, romantic, and modern periods. Continuing focus on correct language usage through composition assignments and study of grammar and vocabulary of literary works. Class and texts in Spanish. Term paper in Spanish required. Prerequisite: Permission of instructor.

ILC 3332. Spanish Translation (On demand; 3) A course on comparative stylistics of Spanish and English. Introduction to techniques of translation from and into Spanish. Texts to be studied will be good translations of Spanish texts translated into English as well as English texts translated into Spanish. Course will allow students to develop skills for analyzing and rendering Spanish texts accurately into English as well as vice versa. Students will examine the best ways to handle idiomatic expressions, tenses and other complex grammatical structures, familiarizing themselves with relevant terminology and theoretical issues. Prerequisite: FLA 2232 or permission of instructor.	**ILC 3333. Spanish Literature (On Demand; 3)** A reading and writing intensive course focusing on the study of Spanish Peninsular literature. Content will focus on Spanish literature from a range of periods or from a specific century, author, or genre. This course will give students the opportunity to study the selected works and to analyze and interpret them in their socio-cultural, historical, and political contexts. Students will practice their reading and writing, speaking, and listening skills in Spanish, while gaining a deeper understanding of Spanish literature. Content may change each time offered. May be repeated for credit when content changes. Taught in Spanish. Prerequisite: FLA 2231.	**ILC 3231. Creative Writing in Spanish (On Demand; 3-4)**. Introduction to the study and practice of various forms of creative writing. Students will read a variety of published texts to learn how to apply the techniques of other writers, as well as feedback from their professor and classmates, to their own writing in Spanish. The course may focus on the study of one or several different literary genres, such as poetry, drama, short stories, and novels. Prerequisite: ILC 2231, its equivalent, or permission of the instructor.
ILC 3334. The Latin American Short Story (On-demand; 3). This course provides the opportunity for students to be introduced to the study of the Latin American short story in the original language. Students will become acquainted with selected short stories from a wide range of authors from different time periods and Spanish-speaking countries in Latin America. Prerequisite: FLA/ILC 2231, its equivalent, or permission of the instructor.	**ILC 3441. Survey of French Literature (On Demand; 3)** A survey of French literature from the Middle Ages to the present. Students will read a selection of full-length works in French, designed to acquaint them with the major figures and periods of French literature. Authors studied may include Rabelais, Moliere, Corneille, Racine, Voltaire, Rousseau, Stendhal, Flaubert, Baudelaire, Hugo, Balzac, Malraux, Sartre, and Camus. Continuing focus on correct language usage through composition assignments and the study of grammar and vocabulary of literary works. Class and texts in French. Term 224 paper in French required. Prerequisite: Permission of instructor.	**ILC 4010. Individual Study (On Demand; 1-4)** An individual study is a research project or course of study, not a performance activity. The individual study may carry from 1-4 semester hours and will be supervised by the student's professor. The student will meet with the professor periodically throughout the semester. The work required may involve a lengthy project suggested by the student and approved by the professor or a similar number of the assignments to those included in a regular course already offered by the department. Students will write in consultation with the faculty member 2-3 learning outcomes based on the content knowledge and the nature of the project. *Prerequisite: Permission of instructor; student must be pursuing a Minor in an international language.*

ILC 4031. Advanced Spanish (On-demand; 4). This course is designed to develop students' proficiency of the Spanish language to an advanced level. It builds on and further develops language skills acquired in earlier Spanish courses. The emphasis is on advanced grammatical structures and the acquisition of a more specialized vocabulary. The objective of this course is to enhance students' communication by focusing on written and oral skills. The course includes advanced practice of speaking skills, auditory comprehension, reading skills, and writing ability. Fluidity of speech, correct pronunciation, grammatical precision, and discursive cohesion will be emphasized. Prerequisites: ILC 3300, their equivalent, or permission of the instructor.	**ILC 4110. Spanish Capstone (On-demand; 4)** This class requires students to complete a capstone project that includes a writing assignment, oral presentation, and exit interview. Effective projects will demonstrate the skills outlined by the Spanish program's learning outcomes. To participate in this class, students must consult with the program director and meet with an advisor to determine the parameters of their project.	**ILC 4490. Study Abroad (On Demand; 1- 15)** Students studying or taking part in an educational project abroad register for FLA 4490. Number of credits is arranged with the department chair and the participating foreign institution. May be repeated for credit.
ILC 4491. International Virtual Exchange (II; 3) Today's globalized world requires leaders in all fields to collaborate internationally and interculturally, which requires a skillset that contains interculturality. This hybrid (synchronous and asynchronous) course develops such skills through gaining theoretical insights about cultural differences, and then applying these insights to real discussions/projects with students living in another country/ies/ culture. Virtual Exchange (VE) brings people together from across international borders/ cultures to explore each other's cultures and their individual perspectives, deepening a self-awareness of one's own culture. Students learn through participation in VE Activities, combined with readings, postings, worksheets, and two deliverables that synthesize all course components. Pre-requisite: one ILC language course (e.g., French I, Spanish I, Russian I, etc.), BUS 1100 Contemporary American Business, or permission of instructor.		

INTERVENTION SPECIALIST

INS 3005. Behavior Management (I, II, III; 3) This course guides the prospective intervention specialist in analyzing and evaluating the many aspects of teaching individuals with various behavioral needs. Integrating specialized courses into unified systems, the course will guide students in preparing individualized instructional planning and assessment of the developmental characteristics of learning for students with Emotional Behavior Disorders (EBD). The focus is on behavioral management techniques for students with mild to moderate disabilities. Pre-service students will conduct an independent investigation of a problem selected in consultation with the instructor. Prerequisites: EDU 2500 or EDU 2600.	**INS 3006. Careers and Transition (I, II, III; 3)** This course prepares teacher candidates for in-depth instructional planning and assessment of individuals with mild to moderate intellectual disabilities. Emphasis is placed on the development of career and transition plan as related to specific learning and behavioral characteristics of individuals with disabilities. This course also addresses the need to develop self-advocacy and independent living skills for individuals with disabilities to be successful after post- 240 secondary education. Prerequisites: EDU 2500 or EDU 2600.	**INS 3007. Collaborating with Parents/Professional Ethics and Responsibilities (I, II, III; 3)** This course provides practice in solving problems that are common to individuals with disabilities by using the parents as a valuable resource in enriching the school curriculum. Professional standards of the Council for Exceptional Children and professional responsibilities are addressed. Prerequisites: EDU 2500 or EDU 2600.
INS 3008. Communication Disorders (I, II, III; 3) This course focuses on the study of the effects of cultural and linguistic differences on growth and development, characteristics and cultural use of language, augmentative and assistive communication strategies, speech, language and vocabulary development. Various methods and strategies for enhancing and communication skills of individuals with exceptionalities will be addressed. Special emphasis is placed on instructional skills, methods and material for diagnosis, remediation and correction of reading difficulties. Prerequisites: EDU 2500 or EDU 2600.	**INS 3009. Curriculum and Assessment (I, II, III; 3)** This course will guide teacher candidates through the process of assessing student academic progress by utilizing research based assessments, choosing the appropriate assessment to use based off of the student's needs, and by learning data collection techniques. Teacher candidates will utilize assessment data to create appropriate adjustments to their academic curriculum to better support students with learning disabilities. Prerequisites: EDU 2500 or EDU 2600.	**INS 3010. IEP Writing Mild/Moderate (I, II, III; 3)** This course prepares teacher candidates for writing an appropriate IEP, ETR, and 504 for students with mild to moderate disabilities. Fully understanding each section of the IEP, ETR, and 504 is imperative for successfully writing and meeting the needs of the child of academic success. Teacher candidates will have the opportunity to be actively engaged in the IEP, goal, and benchmark writing process, while following the Ohio standards and Extended Standards. Prerequisites: EDU 2500 or EDU 2600.

LAW

LAW 1100. Introduction to Law (I, II; 3) The course familiarizes students with the broad array of issues and concepts found in the United States legal system, including its foundation, contemporary structures and functions, policies, and practices. Topics include the US court system, advocacy and mediation, and the legal areas of Torts, Consumer and Housing Law, Family Law, and Individual Rights and Liberties.		

MANAGEMENT

MGT 3380. Human Resource Management (II; 3) This course introduces the recruitment, training, and management of an effective, productive work force. Course will include consideration of governmental rules affecting human resource management. Prerequisite: BUS 2343.	**MGT 3381. Organizational Behavior (I; 3)** Focus is on individual and group behavior in the organizational setting. Employees in an organization are both individuals and members of groups, and it is necessary to consider both aspects of their behavior. Prerequisite: BUS 2343.	**MGT 3401. Government Regulation of Business (I; 3)** This course is a study of the regulatory environment of business. It begins with early laws such as the Interstate Commerce Act and the Sherman Act, includes industry specific regulation, and emphasizes the impact of non-industry specific regulation arising from more recent legislation intended to address broad societal problems. Prerequisites: BUS 2200 and 2343.
MGT 4441. Labor Management Relations (II; 2) This course introduces the goals, strategies, issues, and methods involved in the relationship between management and the remainder of the work force. Emphasis will be placed on the negotiating process and government's role. Prerequisites: BUS 2343 and ECO 2210.	**MGT 4460. Small Business Management (I; 3)** This course investigates common problems encountered in establishing/managing a small business. Topics include search for profitable market niches, financing, hiring the right people, and becoming familiar with government rules and regulations. Prerequisite: BUS 2343.	**MGT 4471. Seminar in International Management (I, II; 3)** This course introduces the international dimensions of management, including strategy formulation and implementation, globalization, the application of management principles in a cross-cultural environment, and the impact of international trade on economies and societies. Prerequisites: BUS 2343, 3370
MGT 4479. Seminar in Management (II; 2) This is a course dealing with contemporary problems and key issues in management. Prerequisite: Senior standing and permission of the instructor.	**MGT 4497. Independent Study in Management (I; 1)** This course offers the student the opportunity to conduct in depth study of certain areas of particular interest in management. Students accomplish research under the instructor's direction. Prerequisite: Senior standing and permission of the instructor.	**MGT 4650. Leadership Theory and Practice (II; 3)** This course explores the importance of leadership in the field of management. Students will build on knowledge gleaned from management perspectives to learn how leaders create organizational direction and motivate employees to achieve objectives. Prerequisite: MGT 3381 and senior standing.

MANAGEMENT INFORMATION SYSTEMS

MIS 2251. Word Processing for Business (I, II; 2) This course expands the introductory word processing capabilities developed in BUS 1500 into more advanced techniques. Focus is placed on more extensive tables for word processing documents and incorporation of inserted symbols and pictures. The concept of personalized letters from a spreadsheet database of the target recipients is introduced and developed. Prerequisite: BUS 1500 or the equivalent.	**MIS 2252. Spreadsheets for Business Analysis (I, II; 3)** This course expands the introductory spreadsheet capabilities developed in BUS 1500 into more intermediate and advanced techniques. Emphasis is placed on higher level functions such as extensive computations using complicated equations, IF statements, LOOKUP functions, pivot tables, charts, graphs, and macros. This course is designed for students who desire to learn advanced spreadsheet skills and ways in which spreadsheets can be used to analyze data and improve decision-making. Prerequisite: BUS 1500.	**MIS 2253. Database Applications for Business (I, II; 2)** This course expands the introductory database capabilities developed in BUS 1500 into more advanced techniques. Emphasis is placed on creating databases without limitations of the database templates. Extensive work is required to create the database structure for ease of database query. Database queries will be developed to investigate the data. Prerequisite: BUS 1500.

MIS 2254. Graphical Presentations for Business (I, II; 2) This course expands the introductory presentation graphics capabilities developed in BUS 1500 into advanced techniques. Emphasis is placed on creating advanced presentations, using more of the professional options. Extensive work is required to incorporate pictures, animation, sound and video to enhance the quality of business presentations. Prerequisite: BUS 1500.	**MIS 3371. Information Management (I, II; 3)** This course exposes students to understanding and managing information in the digital age. Students will learn about the latest information technologies (IT), latest communication devices, and the newest uses of the internet and web as it impacts individuals and organizations. Current management information systems (MIS) components including the structure and analysis of information flows within an organization are explored. Prerequisite: BUS 1500.	**MIS 3372. Business Programming and Information Systems (II; 3)** This course provides the foundation associated with the management of information technology (IT) and systems in a business enterprise. Within this framework, the course will emphasize the process of software development for business using a modern programming language. Prerequisite: MIS 3371.
MIS 3500 Fundamentals of Mobile App Development Fundamentals of Mobile App Development (3 Credit Hours) (I, II). In this course, students will build a solid foundation in programming fundamentals using Swift as the programming language. Students will get practical experience with the tools, techniques, and concepts needed to build a basic iOS app from scratch. Students will learn user interface design principles, which are fundamental to programming and making great apps. Prerequisite: MIS 3371	**MIS 3373 Principles of Enterprise Cybersecurity Management** Enterprise Cybersecurity Management (3 Credit Hours) (I, II) The course will provide students with essential knowledge in data security and the technology involved in securing data. It will also provide a forum to bring in current issues in the MIS area such as information security, big data, mobile/wireless technology, cloud computing and project management. Students will gain insight into the importance of cybersecurity and the integral role of cybersecurity professionals in data security. Prerequisite: MIS 3371.	**MIS 3374 Data Analysis and Modeling** Data Analysis and Modeling (3 Credit Hours) (I, II). Business problem analysis using Spreadsheet and Database tools. Alternative business scenario development and analysis method, data manipulation, functions, arrays, file, spreadsheets and database creation and processing. Emphasizes decision support tools/systems to utilize mathematics and statistical operations in business problem solving. Prerequisite: BUS 1500
MIS 3375 Principles of Project Management Principles of Project Management (I, II) (3 credit hour). Project management theory, terms and concepts are introduced in this course. Students will discover the project life cycle and learn how to build a successful project from pre-implementation to completion. This course will introduce project management topics such as resources, costs, time constraints, and project scopes. Prerequisite: MIS 3371	**MIS 4461. Systems Analysis and Design (I, II; 3)** This course introduces current systems analysis and design of computer support systems for business. Emphasis is placed on responding to user requirements and documenting the changes to the current or proposed system. Prerequisite: MIS 3352.	**MIS 4462. Systems Design and Database Implementation (II; 3)** This course continues instruction in current systems analysis and design of computer systems for business. Emphasis is placed on incorporating database operations in the existing processing of collected data. Current database technology will be usedfor data repository and query. The required documentation of new system development or system modification will be included. Prerequisite: MIS 4461.
MIS 4465. Database Development (I; 3) This course examines current trends in database design and development. It also examines current trends in data communications and networks, emphasizing the structure required for long-term support. The required documentation for new system development or system modification will be included. Prerequisite: MIS	**MIS 4466. Internship in Management Information Systems (On Demand: 1-6)** Course provides the opportunity to explore practical experience in MIS. Student activities will be supervised by the organization sponsoring the internship. The Office of Career Services and the responsible faculty monitors internship. A comprehensive report is required at the completion of the	**MIS 4497. Independent Study in Management Information Systems (I, II; 1-3)** This course offers the student the opportunity to conduct independent research in the field of MIS. Students accomplish research under the instructor's direction, Prerequisites: Senior standing and permission of the instructor.

3352.	internship. Prerequisite: Permission of the instructor.	

MIS 4895 Capstone Seminar in Management Information Systems
Capstone Seminar in Management Information Systems (II; 3). The MIS Capstone course consists of a student-executed Information Systems design project providing an in-depth, practical experience. The central challenge for Management Information Systems professionals is to productively design, implement, and manage information systems in a timely fashion. Management Information Systems challenges typically require an integrated and balanced set of perspectives, techniques, and methods to be effectively dealt with. The capstone course addresses that need by focusing on a real-life information systems design and development project that students execute using an Agile methodology. The project will typically cover the conceptualization, analysis, design, and production of a working, functional prototype of the system that serves as a proof of concept. Prerequisite: MIS 3372, MIS 4461, MIS 4462, Senior standing

MANUFACTURING ENGINEERING

MFE 1110. Principles of Manufacturing (I; 3) Provides a descriptive overview of diverse manufacturing processes and their relationship to product and process design. Covers the fundamentals of orthographic projection and geometric dimensioning and tolerancing as design and planning aids, basic principles of design for manufacturing, assembly, service, and recycling. Laboratory assignments include hands-on application of diverse manufacturing and measuring devices including manual and CNC machines. Features a team design project with formal oral and written technical report requirements. Word processing, spreadsheets, presentation software and Internet usage are introduced to support the formal reporting requirements. Two lectures and two laboratory/recitation periods per week. Equivalent to TAG OES001.	**MFE 1210. Engineering Analysis I (II; 3)** Presents the fundamentals of linear algebra including properties of determinants, matrices, and vector analysis with applications to engineering systems. Includes three-dimensional representation of displacement, velocity, acceleration, forces, and torques and solution of sets of algebraic equations. Introduces state variables, eigenvalues and eigenvectors and the fundamentals of statistics and linear programming. Introduces MATLAB programming. Two lectures and two laboratory/recitations per week. Co-requisite: MTH 2503.	**MFE 1297. Selected Topics in Manufacturing Engineering (II; 1-3)** This course is designed to provide the flexibility to cover selected manufacturing engineering topics not normally available in the required major course. Prerequisite: Approval of the department chair.
MFE 2310. Statics (I; 3) The study of static equilibrium of particles, systems of particles and rigid bodies subjected to two- and three-dimensional loadings. Concepts of forces, moments, couples, resultants, centroids and moment of inertia are covered. Vector algebra and free body diagrams are utilized in the solutions. The solutions will be directed to real world examples and case studies. The skills acquired in the course will increase the ability of students to analyze components and systems in static equilibrium, leading to the enhancement	**MFE 2320. Computer-Aided Design (I; 3)** The goal of this course is to familiarize students with tools and the concepts necessary for mechanical design. The course covers the application of CAD software in the design of products; introduction to engineering software for drafting, solid modeling, design and analysis of mechanical components; introduction to the use of finite element analysis techniques; and the use of commercial CAD and FEA packages. A design project to implement concepts learned during the course is required.	**MFE 2410. Engineering Analysis II (II; 4)** Covers advanced mathematical concepts for engineering analysis including partial derivatives and multiple integrals. Introduces numerical methods for root solving, curve fitting, integration, differentiation and solution of ordinary and partial differential equations; and applications for electrical circuits, vibration analysis, heat transfer, beam deflection, etc. MATLAB programming. Four lecture periods per week. Prerequisite: MTH 3110.

of the problem solving ability of students. Computer exercises will be provided. Two lectures and one recitation/lab per week Prerequisites: MTH 2503 and MFE 1210. Equivalent to TAG OES002.	Two lectures and one 243 recitation/lab per week. Prerequisites: MFE 1110 and INT 1210.	

MFE 2420. Dynamics (II; 3) The study of the kinematics and kinetics of particles, systems of particles and rigid bodies under rectilinear, plane curvilinear and space curvilinear motion. Covers relative motion and constrained motion of connected particles. Concepts of Newton's Law, work, energy, impulse and momentum are utilized in the solutions. Inertia concepts for rigid body translation, fixed axis rotation, and planar motion are presented. The solutions will be directed to real world examples and case studies, etc. The skills acquired in the course will increase the ability of students to analyze dynamic components and systems, thus enhancing problem solving ability. Computer exercises will be provided. Two lectures and one recitation/labs per week. Prerequisites: MFE 2310 and MTH 3110. Equivalent to TAG OES003.	**MFE 2430. Design of Engineering Experiments (II; 3)** Provides fundamentals for designing experiments and making technical inferences from measured variables with an emphasis on manufacturing applications. A brief review of pictorial and graphical representation of manufacturing data, statistical distributions, hypothesis testing, confidence interval estimation and applied design of manufacturing experimentation via treatment comparisons. Manufacturing process control and input parameter optimization using factorial, fractional factorials and orthogonal array. One-, two and three-way NOVA ensuring inferential validity. Computer exercises using DOE-PRO, SPSS, MINITAB, and STATISTICA AND EXCEL. Two lectures and two recitations/laboratories per week. Prerequisite: MFE 1210. Equivalent to TAG OES004.	**MFE 2440. Computer-Aided Manufacturing (II; 3)** This course covers a review of fundamental manual programming for numerical control machines. Topics include CNC machine types, controls, safety, and coordinate measuring systems; speed and feed calculations; power calculations; CNC tooling and fixturing; and programming CNC mills and lathes. Laboratory sessions are designed to gradually introduce the material and gain practical experience of the subject. Two lectures and one recitation/laboratory per week. Prerequisite: MFE 2320
MFE 2497. Selected Topics in Manufacturing Engineering (II; 1-3) See course description for MFE 1297. Credit may range from 1 to 3 semester hours. Prerequisites: Sophomore standing and approval of the department chair.	**MFE 3510. Circuit Analysis (I; 4)** Provides the fundamentals of DC and AC circuit analysis including circuit elements, Ohm's law, Kirchhoff's law, mesh and node equations, circuit transformation techniques, first and second order circuits, operational amplifiers, phasor representations, power analysis, polyphase systems, linear and ideal transformers, complex frequency and computer simulation using PSPICE. Laboratory focuses on the measurement of circuit parameters and electrical quantities. Three lectures and two laboratory periods per week. Prerequisites: MTH 3110 and PHY 2213.	**MFE 3520. Microprocessors (I; 3)** Covers binary systems, Boolean algebra, logic gates, combinational and sequential circuits, microprocessors /microcontrollers in digital system design, assembly language programming and interfacing of microprocessor-based systems. Two lectures and two laboratory periods per week. Co-requisite: MFE 3510
MFE 3530. Strength of Materials (I; 3) Introduces the concepts of stress and strain in elastic materials. Covers axial, torsional and bending deflections and stresses, and the analysis of combined stresses using Mohr's circle. Presents failure theories for ductile and brittle materials. Includes buckling theory for columns and the effect of impact loading. Laboratories include experimental stress	**MFE 3540. Material Science and Processes (I; 4)** Relates the composition, structure, and properties of engineering materials to their performance in service. Metals, ceramics, polymers, and composites are studied. Atomic bonding, crystalline structure, non-crystalline structure, and phase diagrams are included. Mechanical properties are evaluated in the laboratory. Three	**MFE 3550. Thermodynamics and Heat Transfer (I; 3)** Introduces the theory of thermodynamics and heat transfer with application to cooling, cutting, fabrication, molding and welding processes. It covers the fundamental principles and methods of energy transformations, fundamental thermodynamics laws and relationships for ideal and real fluids, basics of heat

analysis utilizing photo elastic techniques and electrical strain gages. Two lecture and two laboratory/recitation periods per week. Prerequisite: MFE 2410.	lecture periods and two laboratory periods per week. Prerequisite: CHM 1202 and Co-requisite MFE 3530.	transfer, and the rates of spatial and temporal energy changes and the properties of engineering systems undergoing such processes. Two lectures and two laboratories/recitations per week. Prerequisites: MTH 3110 and MFE 2410.
MFE 3610. Automatic Control Systems (II; 3) Analysis and design of linear feedback control systems, modeling of dynamic systems, sensitivity analysis, state variable representation, transfer functions, simulation, performance and stability, frequency response and root locus techniques. Two lectures and two laboratory/recitations per week. Prerequisite: MFE 3510.	**MFE 3620. Programmable Logic Controllers (II; 3)** This course covers the utilization of PLC's in industrial control applications. Topics include safety and grounding, ladder logic, inputs-outputs, timers and counters, sequencing and programming, installation and interfacing techniques, and communication between PLC's. Two lectures and two laboratories/recitations per week. Prerequisite: MFE 3520.	**MFE 3630. Manufacturing Processes (II; 4)** Introduces the fundamentals of manufacturing processes with a focus on quality products at an economical price on a prescribed schedule. Provides a broad overview of manufacturing methods including metal casting and joining, sheet metal bending, conventional metal removal, forging, plastics and composites processing. Includes mold and die design concepts. Experimental designs are utilized to investigate the effects of various process parameters. Three lectures and two laboratories per week. Prerequisite: MFE 3540.
MFE 3640. Machine and Tool Design (II; 4) Focus is on the application of analytical and empirical methods to assist in the design of mechanical systems with special emphasis in the area of tool design. Topics covered in detail include fatigue theory, Castigliano's method, work holding principles, fixture design, fits and tolerancing, and design principles for power screws, bearings, and gears. A team design project with formal reporting requirements provides experience in the application of theory and the selection of commercial components. The project emphasizes the relationship between product and process design, and the engineering documentation needed to control product uniformity and quality. Three lectures and two laboratories/recitations per week. Prerequisites: MFE 3530 and MFE 3540.	**MFE 3697. Selected Topics in Manufacturing Engineering (II; 1-3)** See course description for MFE 1297. Credit may range from 1 to 3 semester hours. Prerequisites: Junior standing and approval of the department chair.	**MFE 4710. Measurement and Instrumentation (I; 3)** Preparation for diverse measurements required for research or production. Techniques for obtaining reliable and cost-effective measurements including the proper selection and use of instruments and interpretation of measured data. Consideration of accuracy, precision and statistical analysis of error in measurements. Topics covered include sensors and transducers, digital instruments, frequency response, loading effects, noise, digital sampling rates, uncertainty and statistical data analysis. Two lectures and two laboratories/recitations per week. Prerequisites: MFE 3510
MFE 4720. Manufacturing Quality and Economy (I; 4) Fundamentals of total quality engineering for optimizing process and product efficiency and effectiveness. Course covers contemporary quality control philosophies, total quality management, customer focus strategies, statistical process control, reliability and	**MFE 4730. Hydraulics and Pneumatics (I; 3)** Review of fundamentals of fluid properties. Analysis of incompressible flow in piping systems and conduits using Bernoulli's equation. Study of the sources of hydraulic power: pumps, actuators, directional control valves, pressure and flow control valves, servo valves, pipes and fittings, motors. Pipe	**MFE 4795. Senior Design Project I (I; 1)** The first phase of the two-course, capstone design sequence to provide experience in the practical application of prior course work. Includes topic selection, selection of faculty advisor(s), literature search, conceptual design, development of a work plan, and arrangements to secure required

metrology. Overview of technical and managerial aspects of quality: principles of quality by design, human factors in quality control, experimental 245 design for quality, internal quality audits. Covers critical assessment of the time value of money, equivalence, discounted cash flow analysis, break-even and payback analysis of engineering alternatives for justification of machine procurement and processes; exposure to depreciation and inflation accounting, overhead costs and their application; and study of cost estimation and activity-based costing, make or buy decisions. Case study assignment provided. Three lectures and two laboratories/recitations per week. Prerequisites: MFE 2410 and MFE 3640. Equivalent to TAG OES005.	sizing using concepts of factor of safety via burst and working pressures. Provides study of pump types, characteristics and their efficiencies and pump sizing based on flow demands and head requirements. Brief study of pneumatic components: compressors, orifices, air control valves, pneumatic actuators. The laboratory sessions focus on hydraulic and pneumatic components and systems. Two lectures and two laboratory/recitations per week. Prerequisite: MFE 3550.	resources. The project must involve realistic constraints such as cost, performance, reliability, manufacturability, safety, ergonomics and aesthetics. Requires formal oral and written reporting. Two laboratory/recitation periods per week. Prerequisite: Senior standing in the MFE major.
MFE 4810. Design for Assembly and Systems Integration (II; 3) This course provides students with the knowledge, methodologies, and practice to optimize the design of mechanical products for ease of assembly in manufacturing. The topics include significance of Design for Assembly (DFA), methods to characterize and describe assembly, types of assembly systems used in practice, application of DFA principles to mechanical product design, practice of designing parts to facilitate assembly, analysis of assembly in terms of DFA, and redesign to improve assembly. The course will address issues of manufacturing product and system integration, covering combination of hydraulic, electrical, mechanical and robotic parts and components into an integrated product. Two lectures and two laboratories per week. Prerequisites: MFE 2440 and MFE 3640.	**MFE 4820. Manufacturing Planning, Control and Simulation (II; 4)** Study of the techniques for planning, organizing and controlling the resources for the manufacture of quality products. Factory simulation and animation using Pro Model or ARENA or WITNESS to model the operational characteristics of manufacturing and management systems to support efficient manufacturing and information flow. Coverage of project management principles, lean manufacturing, Just-In-Time concepts, theory of constraints, and manufacturing resources planning systems for large-scale manufacturers and small businesses. Discussion of forecasting techniques, demand management, master production scheduling, materials and capacity requirements planning, shop floor control, scheduling practices, inventory status and control, and manufacturing databases. Computer tools discussed include ERP and MRP – II. Assimilation and application of principles learned in the course by group simulation exercise of two manufacturing organizations using two student teams that play the "Manufacturing Game." Three lectures and two recitations/laboratories per week. Prerequisite: MFE 4720.	**MFE 4895. Senior Design Project II (I1; 2**) The concluding phase of the two course, capstone design sequence to provide experience in the practical application of prior course work. Requires completion of the project work plan including detailed design, fabrication of any needed hardware, any required assembly, testing, and evaluation of results. Requires formal oral and written reporting. Four lectures/ laboratories per week. Prerequisite: MFE 4795
MFE 4897. Undergraduate Research (II; 1-3) Research performed by an individual student or a small team of 246 students. It is the responsibility of the student to		

identify an appropriate faculty research advisor willing to supervise the work. The research topic, work plan and number of credit hours are to be determined in advance by mutual agreement between the student and research advisor. A formal written final report is required. Prerequisites: Junior or senior standing and approval of the department chair.		

MARKETING

MKT 3353. Entrepreneurial Marketing (I; 3- Even Years) This course gives a practical view of marketing from a small business perspective. Focusing on lifetime marketing, customer focus, and alternative approaches to marketing. The course will help show how to compete with the large competitor on a small budget to gain lifetime customers. Prerequisites: BUS 2353	**MKT 3354. Sports Marketing (I;3)** This course is a study of the marketing, promotion, sales, and sponsorship strategies utilized in the sports industry, by both sports properties (teams, leagues, events, media, apparel and equipment manufacturers, etc.) and companies marketing their brands through sports. This course is meant to cover three basic components of sports marketing: (1) the use of sports as a marketing tool for other products; (2) the marketing of sports products; and (3) the emerging considerations relevant for both marketing through and the marketing of sports. By the end of this course, students should understand: The marketing tools (e.g., research, segmentation) and the marketing mix options for sports products in marketing and the perspectives of participants and spectators as sports consumers will be explored. Prerequisites BUS 2353.	**MKT 3355. Digital Marketing (II; 3)** This course investigates how "brick and mortar" organizations can incorporate the entrepreneurial and management side of internet marketing to create an online presence and increase market share. In addition to textbook and selected course readings, students will be introduced to e-marketing in a computer lab where they will evaluate search engines, construct blogs, web sites, and learn about other viral, email, social, and electronic marketing. The course focuses on applications, innovations, and future direction (not on the technology that enables the Internet and www). Heavy reading, electronic and in-class discussions, and internet browsing required. Prerequisites BUS 2353.
MKT 3390. Retail Marketing (On Demand; 3) This course studies the operation and management of retail establishments. The course covers a broader range of topics involved in retail including strategic retail management, customer behavior and segmentation, trading area and site analysis, store design, merchandising and buying decisions and human resource management. Prerequisite: BUS 2353	**MKT 3395. Sales Management (II; 3)** This course covers the principles of planning, organizing, and controlling a sales force including selecting, training, compensating, supervising, and motivating sales personnel. Prerequisite: BUS 2353.	**MKT 3396. Consumer Behavior (I, II; 3)** This course is a study of consumer decision making processes and the utilization of behavioral sciences for understanding buyer-seller behavior. Prerequisite: BUS 2353.
MKT 3456. Purchasing (On Demand; 3) An overview of the current purchasing function for Contemporary American Business. This includes negotiating contracts, delivery schedules and quality management.	**MKT 4451. Advertising (II; 3)** This course covers the managerial uses of advertising, fundamentals of copy, media selection, agency-client relations, and measuring effectiveness. Current and emerging advertising issues in various media will be examined. Prerequisite: BUS 2353. Equivalent to TAG OCM012.	**MKT 4455. Marketing Research (I; 3)** This course studies the collection and analysis of new market data applicable to planning, organizing, and operating research projects. Techniques used for market analysis such as sampling, questionnaires, interviewing are

		emphasized. Required of all marketing majors. Prerequisites: BUS 2353.
MKT 4465. Marketing Management (II; 3) This course studies marketing policies and strategies with emphasis on decision-making for marketing effectiveness. Prerequisites: MKT 4455 and senior standing	**MKT 4466. Internship in Marketing (On Demand: 1-6)** Course provides the opportunity to explore practical experience in marketing. Student activities will be supervised by the organization sponsoring the internship. The Office of Career Services and the responsible faculty monitors the internship. A comprehensive report is required at the completion of the internship. Prerequisite: Permission of the instructor	**MKT 4467. International Marketing (On Demand; 3)** This course focuses on international marketing concepts and the influence of culture on the marketing plan. Challenges and opportunities facing U.S. firms seeking expansion abroad are examined. Prerequisite: BUS 2353.
MKT 4479. Marketing Practicum (I; 3) This course program will develop the student's "real world" marketing experience and prepare for a job search. In each session, students will work in teams to complete a marketing experience and prepare for a job search. Each session, students will also work in teams to complete a market project, receive extensive training and exposure to the marketing industry, hone their job-seeking skills, and develop a relationship with their business mentor. The course will require travel to the sponsor's place of business. Students may be responsible for travel. Prerequisites: GPA 3.0 or higher; Junior or Senior standing; BUS 2353 and at least one upper-level class from the student's option or concentration are. The course is only open to business majors.	**MKT 4485. Independent Study in Marketing (II; 1)** This course offers the student the opportunity to conduct in-depth study of certain areas of particular interest in marketing. Student research is accomplished under the direction of the instructor. Prerequisites: Senior standing and permission of the instructor.	

MASTER OF BUSINESS ADMINISTRATION

MBA 5100. Managerial Accounting (On Demand; 3) This course covers managerial accounting and cost management practices that can be strategically applied across the various functions of a business organization to improve organizational performance. This course emphasizes the methods available to measure and evaluate costs for decision-making and performance evaluation purposes. Topics include cost behavior and analysis, product and service costing, value analysis and relevant costs for internal decision-making.	**MBA 5110. Corporate Finance (On Demand; 3)** This course introduces the concepts, principles, and techniques of financial management with emphasize on their application for financial decision-making and policy formation. Topics include cash flow and financial statements, time value of money, bond and stock valuation, risk and return, cost of capital, capital budgeting techniques, making capital investment decision, capital structure policy, dividends, and payout policy, and working capital management.	**MBA 5120. Organizational Behavior (On Demand; 3)** This course examines the interaction between individuals, groups and the organization in the accomplishment of organizational goals and objectives. It seeks to assist students in understanding and predicting the performance of individuals and ultimately the organization in which they work. As an advanced course in management, the course draws case studies, organizational experiences of students, Internet research, and readings. Topics discussed in-depth include perception and learning, motivation and work-related attitudes,

		human resource management, creating effective work teams, organizational communication, decision making, interpersonal behavior, influence, power, politics, and leadership.
MBA 5130. Marketing Management (On Demand; 3) This course is the core marketing course in the MBA program. It is designed to help students improve their ability to make effective marketing decisions. Course topics include market-oriented strategic planning, marketing research and information systems, consumer behavior, market segmentation, target market selection and positioning, product and service planning and management, pricing, distribution, and integrated communications.	**MBA 5140. Quantitative Methods for Managers (On Demand; 3)** This course provides an introduction and a conceptualunderstanding of quantitative methods in decision-making process. The focus of the course is the application of the scientific method in problem solving using real-world examples and/or case studies. This course also covers mathematical and statistical tools that can be used by the decision maker.	**MBA 5150. Corporate Economic Decision Making (On Demand; 3)** This course intends to give a working knowledge of the analytical tools that bear most directly on the economic decisions firms must regularly make. Market structure and industrial performance are emphasized as is the strategic interaction of firms. The behavior of individual markets – and the producers and consumers that sell and buy in those markets – are examined in some detail, focusing on cost analysis, the determinants of market demand, pricing strategy, market power, and the implications of government regulatory policies. Also examined are the implications of economics on other business practices, such as incentive plans, auctions, and transfer pricing.
MBA 5160. Business Ethics (On Demand; 3) This course provides an overview of various philosophical approaches to ethical decision-making and practical applications involving ethical problems that arise in business. This course introduces the student to the theory and practice of ethical leadership.	**MBA 5170. Management Information Systems (On Demand; 3)** A study of systems used to accumulate, classify, and organize information to facilitate managerial decision making. The course emphasis is placed upon the upper-level managerial considerations associated with the development, deployment, and use of information systems.	**MBA 6100. Investments (On Demand; 3)** This course introduces the framework of the investment process, securities valuation, derivatives markets, portfolio theory, and investment performance evaluation. In addition, trading simulation is incorporated to provide students hand-on experience of trading securities.
MBA 6110. International Business (On Demand; 3) The increasing globalization of the marketplace affects all who are involved with business or who must make business decisions. Even those who are not directly involved in international business are affected in their domestic operations by international events and by the business activities of foreign entities. Therefore, it is imperative to be knowledgeable about international business systems. Therefore, this course will introduce the concept of international business as a system and the theories which underlie it; institutions which are visual evidence of it; production, marketing, financial, legal and other subsystems which comprise the total system. It also examines national governmental and international institutional controls and constraints,	**MBA 6120. Supply Chain and Corporate Logistics (On Demand; 3)** This course surveys operations research models and techniques developed for a variety of problems arising in logistical planning of multi-echelon systems. There is a focus on planning models for production/inventory/distribution strategies in general multi-echelon multi-item systems. Topics include vehicle routing problems, dynamic lot sizing inventory models, stochastic and deterministic multi-echelon inventory systems, the bullwhip effect, pricing models, and integration problems arising in supply chain management. Probability and linear programming experience required.	**MBA 6130. Leadership (On Demand; 3**) This course explores the concept of leadership in postmodern organizations and allows learners to better understand various leadership paradigms. This course also focuses on creating a leadership profile that learners can use to be more effective leaders.

which impact the environment in which the system operates.		
MBA 6200. Fundamentals of Project Management (On Demand; 3) This course provides and exploration of framework and fundamental methodologies of project management. Topics include foundational concepts such as requirements gathering, scope management, change control and time management, as well as an introduction to common tools, techniques and the process required to become a certified Project Manager.	**MBA 6210. Project Initiation and Selection (On Demand; 3)** This course emphasizes the decision-making process used by leaders to launch projects that are aligned with the mission and vision of the organization. Topics include techniques used by the project team to optimize the project selection process, such as return on investment (ROI), payback period, internal rate of return (IRR), and net present value (NPV). The impact of various project management tools and techniques on time, cost, scope, quality, risk, customer satisfaction, and resources is also examined. Prerequisite: MBA 6200.	**MBA 6220. Project Implementation (On Demand; 3)** the focus of this course is on implementing a project. The course discusses the management of the project changes, from stimulating the initial action to monitoring and reviewing it to control the project's progress. During project implementation, the project manager leads the project team to complete the work defined in the project management plan and satisfy the project specifications. This course addresses communication, project changes, monitoring, and controlling. Prerequisites: MBA 6200 and MBA 6210.
MBA 6500. Strategic Management (On Demand; 3) This course focuses on strategic management concepts and techniques to understand how firms formulate, implement, and evaluate strategies. It uses a skills-oriented practitioner perspective to strategic management and offers the most current, comprehensive, state-of-the-art strategic management concepts and techniques to help students develop the conceptual and analytic skills necessary to succeed in today's and tomorrow's business world.	**MBA 6510. Project Management Practice (On Demand; 3)** Students in this capstone course will utilize skills gained throughout the program to plan and implement a project from conception to conclusion. Students will analyze project goals and objectives, scope in relationship to budget, schedule, and resources to develop a comprehensive project with a plan of implementation. Prerequisite: MBA 6220.	

MATHEMATICS

MTH 1550. Modern Applications of Mathematics (I, II; 3) A study of the use and importance of mathematics to real world problems. Topics include logic, finance, probability and statistics, geometry, graphical representation of data, linear and exponential modeling, and mathematics in music, art, and voting systems. This course is not intended for students majoring in a discipline requiring advanced mathematics. This course fulfills a general education requirement.	**MTH 1750. College Algebra (I, II; 3)** Topics include functions, rational expressions, systems of linear equations, Factor and Remainder Theorem, operations on functions, radical equations, inequalities, matrices, variations and exponential and logarithmic functions, sequences, series, and the binomial theorem. Equivalent to TAG TMM001.	**MTH 2001. Probability and Statistics I (I, II; 3)** Topics include measures of central tendency, measures of dispersion, probability models, conditional probability, combinations, distributions, estimation and hypothesis testing. Prerequisite: MTH 1750.
MTH 2002. Probability and Statistics II (II; 3) Topics include testing populations means, proportions, variances, contingency tables, regression, ANOVA, computer applications and non-	**MTH 2500. Pre-Calculus (I, II; 4)** This is an accelerated course in College Algebra and Trigonometry. Topics include linear, quadratic, polynomial, rational, radical, root, piecewise, exponential, logarithmic, trigonometric and inverse trigonometric	**MTH 2501. Trigonometry (I, II; 3)** Topics include conic sections, exponential and logarithmic functions, trigonometric functions, inverse trigonometric functions, identities and equations, lines, polar coordinates, vectors in the plane,

parametric statistics. Prerequisite: MTH 2001.	functions; graphs and transformations; equations and inequalities; systems of equations; sequences and series; vectors and applications. Prerequisite: placement exam.	application problems, and complex numbers. Prerequisite: MTH 1750 or placement tests. Equivalent to TAG TMM003.
MTH 2502. Calculus I (I, II; 4) Topics include limits of functions, infinite limits, derivative and techniques of differentiation, implicit differentiation, higher derivatives, graphing, maxima and minima, plane curves, motion, anti-derivatives, indefinite, and definite integrals, and Fundamentals Theorem of Calculus. Prerequisite: MTH 2500 or MTH 2501. Equivalent to TAG TMM005.	**MTH 2503. Calculus II (I, II; 5)** Topics include the fundamental theorem of calculus, the definite integral, techniques and applications of integration. Evaluation of improper integrals, indeterminateforms, graphs of 248 polar equations, area in polar coordinates and parametric equations. Differentiation and integration a power series, Taylor and MacLaurin series. Calculation and application of the dot and cross products of vectors. Prerequisite: MTH 2502. Equivalent to TAG OMT006.	**MTH 2540. Foundations in Mathematics (I, II; 3)** This course is an introduction to mathematical proof, symbolic logic, induction, set theory, relations, functions, countability, and selected topics in number theory. Prerequisite: MTH 2502. Equivalent to TAG OMT006.
MTH 3000. Geometry for Teachers (II; 3) Topics include definitions, axioms, plane figures, triangle theorems, similar triangles, areas, computation of areas, solids, volumes, computation of volumes, and history of geometry. Prerequisite: MTH 1750.	**MTH 3001. Linear Algebra (I; 3)** Topics include matrices, determinants, linear systems, vector spaces, linear transformations, eigen values and eigenvectors.	**MTH 3002. Calculus III (II; 4)** Topics include the theory of infinite series, analytic geometry of space, vector in space, partial derivatives, and multiple integrals. Prerequisite: MTH 2503.
MTH 3110. Differential Equations and Discrete Dynamical Systems (I; 4) First and second order, linear, simultaneous equations with descriptions of solution methodology, Laplace transforms, applications, and solutions methodology for nonlinear differential equations and nonlinear difference equations. Prerequisite: MTH 2503 or permission of the instructor.	**MTH 3310. Numerical Methods (II, On Demand; 3)** Solutions of equations, successive approximations, Newton-Raphson Method, roots of polynomials, error analysis and process graphs; simultaneous linear and nonlinear equations, factorization methods, iterative methods for solving linear systems; description and solution of eigenvector problems, interpolation methods with and without spline functions; numerical solutions for ordinary differential equations, numerical solutions for partial differential equations, and applications of Monte Carlo methods. Prerequisites: MTH 2503 or permission of instructor.	**MTH 3430. Operations Research (I/Odd Years;3)** Topics include stochastic processes, linear programming, transportation problems, inventory control, and network theory. Prerequisites: MTH 3001
MTH 3520. Abstract Algebra (I, II; 3) Topics include properties of integers, groups, subgroups, quotient groups, group actions, products, homomorphisms, isomorphisms, and finite abelian groups. Prerequisite: MTH 2540.	**MTH 3521. Abstract Algebra II (II; 3)** Topics include rings, ideals, integral domains, fields, Euclidean domains, principal ideal domains, vector spaces, polynomial rings, and field extensions. Prerequisite: MTH 3520	**MTH 3530. Mathematical Writing and Research (II; 2)** Topics include the mathematical research process, technical writing, and communication in mathematics. Prerequisite: MTH 2540.
MTH 3610. Introduction to Discrete Structure (II, On Demand; 3) Topics include review of set algebra including mappings and relations, elements of the theory of directed and undirected grams, symbolic logic, and applications of these	**MTH 4030. History of Mathematics (I; 3)** The development of mathematics from ancient times to the twentieth century. Prerequisite: Junior standing.	**MTH 4120. Introduction to Real Analysis (I; 3)** Topics include the system of real numbers, functions, sequences, limits, the theory of continuity, differentiation, Riemann integration; sequences of

structures to various areas of the computer. Prerequisite: MTH 1750 or higher.		functions, and infinite series. Prerequisite: MTH 2540
MTH 4600. Capstone: Selected Topics in Mathematics (II; 3) This course is designed to meet the needs of advanced students as a preparation for graduate study or employment in mathematics related fields. Possible topics include, but are not limited to, topology, group theory, projective geometry, real analysis: probability, mathematical statistics, combinatorial analysis, and operations research. Prerequisite: Permission of the instructor.	**MTH 4730. Functions of a Complex Variable (II, even years only; 3)** Topics include complex numbers, elementary functions, power series, analytic functions, integrals, residues, Cauchy's Theorem, and Moreara's Theorem. Prerequisites: MTH 2503 or permission of the instructor	**MTH 4897. Mathematics for Graduate Studies (I, II; 3)** Topics include calculus, linear algebra, complex variables, abstract algebra, and differential equations. Prerequisites: MTH 4120 and MTH

MILITARY SCIENCE

MIL 1511. Foundations of Officership with Leadership Laboratory (I; 3) Students will increase confidence through team study and activities in basic drill, physical fitness, rappelling, leadership reaction course, first aid, oral presentations, and basic marksmanship; learn fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments; learn and practice basic skills; and build self-confidence and teambuilding leadership skills that can be applied throughout life. Physical fitness is optional for non-contracted cadets. Students will participate in and learn to lead a physical fitness program. Emphasis will be placed on the development of an individual fitness program and the role of exercise and fitness in one's life. The course is taught to meet the requirement for entry into the Advance ROTC Program. The course requires no military obligation and is open to all Central State University students.	**MIL 1512. Basic Foundations of Officership with Leadership Laboratory (II; 3)** Students will learn and apply the principles of effective leading; reinforce self-confidence through participation in physically and mentally challenging exercises with upper division ROTC students; develop communication skills to improve individual performance and group interaction; relate organizational ethical values to the effectiveness of a leader; learn and practice basic skills; and build self-confidence and team-building leadership skills that can be applied throughout life. Physical fitness is optional for non-contracted cadets. Students will participate in and learn to lead a physical fitness program. Emphasis will be placed on the development of an individual fitness program and the role of exercise and fitness in one's life. The course is taught to meet the requirement for entry into the Advance ROTC Program. The course requires no military obligation and is open to all Central State University students	**MIL 2511. Individual Leadership Studies with Leadership Laboratory (I; 3)** Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communication, making safety assessments, movement techniques, planning for team safety/security, and methods of pre-execution checks. Practical exercises with upper division ROTC students. Students will learn techniques for training others as an aspect of continued leadership development; learn and practice basic skills; and build self-confidence and teambuilding leadership skills that can be applied throughout life. Physical fitness is optional for non-contracted cadets. Students will participate in and learn to lead a physical fitness program. Emphasis will be placed on the development of an individual fitness program and the role of exercise and fitness in one's life. The course is taught to meet the requirement for entry into the Advance ROTC Program. The course requires no military obligation and is open to all Central State University students.
MIL 2512. Leadership and Teamwork with Leadership Laboratory (II; 3) See description for MIL 2511.	**MIL 2895. Leadership Training Course (III; 3)** A 28- day summer camp conducted at Fort Knox, Kentucky. The student receives pay, and the ROTC program defrays costs for travel, lodging, and most meals. Completion of MIL 2895 qualifies the student for entry into the Advanced Course. Spaces are limited.	**MIL 3511. Leadership and Problem-Solving with Leadership Laboratory (I; 3)** A series of practical opportunities to lead small groups, receive personal assessments and encouragement, and lead again in situations of increasing complexity. Uses small unit defensive tactics and opportunities to plan and

	Candidates may apply for space at any time during the school year prior to the summer camp	conduct training for lower division students both to develop such skills and as vehicles for practicing leading. FTX (Field Training Exercise) of 24-96 hours required. Involves leadership responsibilities for planning, coordination, execution, and 250 evaluation of various training activities with Basic Course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions. Students will participate in and learn to plan and lead a physical fitness program that develops the physical fitness required of an officer in the Army. Emphasis will be placed on the development of an individual fitness program and the role of exercise and fitness in one's life.
MIL 3512. Leadership and Ethics with Leadership Laboratory (II; 3) Continues the methodology of MIL 3511. Students will analyze tasks; prepare written or oral guidance for team members to accomplish tasks; delegate tasks and supervise; plan for and adapt to the unexpected in organizations under stress; and examine the importance of ethical decision making in setting a positive climate that enhances team performance. FTX (24-96 hours) required. The course involves leadership responsibilities for planning, coordination, execution, and evaluation of various training activities with Basic Course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions. Students will participate in and learn to plan and lead a physical fitness program that develops the physical fitness required of an officer in the Army. Emphasis will be placed on the development of an individual fitness program and the role of exercise and fitness in one's life	**MIL 3797. Military History (I, II; 3)** The course objective is to improve the student's understanding of the evolution of war, the evolution of professionalism in the U. S. military, and the place of the American military in society. The course requires no military obligation and is open to all Central State University students. Prerequisite: Permission from the Professor of Military Science.	**MIL 3895. Leadership Development and Assessment Course (III; 3)** A 33-day camp conducted at Fort Knox, Kentucky. The student receives pay, and the ROTC program defrays the costs of travel, lodging, and most meals. The Leadership Development and Assessment Course environment is highly structured and demanding, stressing leadership at small unit levels under varying, challenging conditions. Individual leadership and basic skills performance are evaluated throughout the camp. The leadership and skills evaluations at the camp weighs heavily in the subsequent selection process that determines the type of commission and job opportunities given to the student upon graduation from ROTC and the University.
MIL 4197. Independent Study of Military Leadership (I, II; 2) The Independent Study of Military Leadership course is structured to allow a student to research and independently study a specific military topic agreed upon by the Professor of Military Science and the	**MIL 4511. Leadership and Management with Leadership Laboratory (I; 3)** Students will plan, conduct, and evaluate activities of the ROTC cadet organization; articulate goals; put plans into action to attain goals; assess organizational cohesion and develop strategies to	**MIL 4512. Officership with Leadership Laboratory (II; 3)** Continues the methodology from MIL 4511. Students will identify and resolve ethical 251 dilemmas; refine counseling and motivating techniques; examine aspects of tradition and law as they relate to

student. In agreement with the Professor of Military Science, the student will select a topic of historic significance to understand, apply, and appreciate the lessons learned from past experiences of military operations or programs and their impact upon the Army or the Nation. The course will entail detailed research, independent processing of thought, facts, and theory. The end result of the course will be a written product of the quality to be published in a military journal that meets or exceeds writing requirements for college level students. The course will be taught by the Professor of Military Science. Course may be repeated for credit for a total of 6 semester hours.	improve it; develop confidence in skills to lead people and manage resources; and learn and apply various policies and programs in this effort. FTX (24-96 hours) required. The course involves leadership responsibilities for planning, coordination, execution, and evaluation of various training activities with Basic Course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions. Students will participate in and learn to plan and lead a physical fitness program that develops the physical fitness required of an officer in the Army. Emphasis will be placed on the development of an individual fitness program and the role of exercise and fitness in one's life.	leading as an officer in the United States Army; and prepare for a future as a successful lieutenant. FTX (24-96 hours) required. The course involves leadership responsibilities for planning, coordination, execution, and evaluation of various training activities with Basic Course students and for the ROTC program as a whole. Students develop, practice, and refine leadership skills by serving and being evaluated in a variety of responsible positions. Students will participate in and learn to plan and lead a physical fitness program that develops the physical fitness required of an officer in the army. Emphasis will be placed on the development of an individual fitness program and the role of exercise and fitness in one's life.

MUSIC

US 1000. Student Recital (I, II; 0) Music majors must attend this class and perform on their principal instrument once each semester. Students attend concerts, lectures, theater productions, art exhibitions, master classes, etc.	**MUS 1100. Principles of Theory (II; 5)** The objective of this course is to prepare students for MUS 1101. It includes the study of standard notation, triads, scales, intervals, rhythmic elements, sight-singing, and dictation in tonal music. Aural skills will focus on translation of notation into sound and sound into notation. This course is for students not passing the MUS 1101 placement exam. It must be passed to enter into MUS 1101. Open to non-music majors.	**MUS 1101. Music Theory I (I; 5)** The objective of this course sequence (MUS 1101 and 1102) is for students to become literate in the language of music (and perhaps one or two of its diverse dialects or styles). Students learn the basics of music theory (such as notation, intervals, scales, chords, time classifications, time signatures, etc.) and begin to develop aural organizational skills through sight singing, dictation, and improvisational exercises. The Western European compositional practice of the years 1600-1830 is studied through analysis of musical examples at the phrase level (cadences, phrase members, motives, period structure, etc.) and by writing melodies, voice leading exercises (including species counterpoint exercises adapted to this period), and other short compositions that explore and demonstrate an understanding of the contrapuntal and harmonic practice from that period. These skills and concepts are generalized and adapted to the study of related musical dialects of other cultures and time periods: i.e., "Dixieland" and other early jazz and improvisatory styles; and African, African American, and European traditional and popular music styles of the twentieth century. Equivalent to TAG OAH052.

MUS 1102. Music Theory II (II; 5) The objective of this course sequence (MUS 1101 and 1102) is for students to become literate in the language of music (and perhaps one or two of its diverse dialects or styles). Students learn the basics of music theory (such as notation, intervals, scales, chords, time classifications, time signatures, etc.) and begin to develop aural organizational skills through sight singing, dictation, and improvisational exercises. The Western European compositional practice of the years 1600-1830 is studied through analysis of musical examples at the phrase level (cadences, phrase members, motives, period structure, etc.) and by writing melodies, voice leading exercises (including species counterpoint exercises adapted to this period), and other short compositions that explore and demonstrate an understanding of the contrapuntal and harmonic practice from that period. These skills and concepts are generalized and adapted to the study of related musical dialects of other cultures and time periods: i.e., "Dixieland" and other early jazz and improvisatory styles; and African, African American, and European traditional and popular music styles of the twentieth century. Prerequisite: MUS 1101. Equivalent to TAG OAH052.	**MUS 1127. Marching Band (I; 1)** Preparation of band pageants for appearances at football games and in parades. Students not only perform, but also gain an appreciation for the rich marching band tradition at historically African American colleges and universities. Music education majors are encouraged to arrange music and chart marching drills for the band. Prerequisites: Audition and permission of instructor.	**MUS 1128. Concert Band (II; 1)** An organization which studies and performs representative works from the concert band literature, including Western and non-Western music, with an emphasis on standard repertory, and an emphasis on African and 252 African American music. Open to all University students. Prerequisites: Audition and permission of the instructor. Equivalent to TAG OAH022
MUS 1129. Robeson Winds (I, II; 1) An organization devoted to the study and performance of classical literature for small wind ensembles. Prerequisites: Audition and permission of instructor.	**MUS 1131. University Choir (I, II; 1)** An organization which studies and performs representative masterworks from Western and non-Western music (with emphasis on standard repertory and on African and African American literature). Required of all music majors with a vocal emphasis. Open to all University students. Prerequisites: Audition and permission of the instructor. Equivalent to TAG OAH022.	**MUS 1140. Music Appreciation (I, II; 3)** An introduction to the elements of music; development of intelligent listening with emphasis on the popular music of today; a brief introduction to music styles of the past. Previous training in music not required.
MUS 1150. Piano Class for Non-Music Majors (I, II; 3) This course deals with the study of piano and music fundamentals, including pitch reading, chord chart reading, rhythm, rudimentary piano technique, and beginning piano repertoire. It is designed for students with no prior musical instruction	**MUS 1151. Piano Class I (I; 1)** This course will cover fundamentals of notation, rhythmic studies in clapping, elementary keyboard techniques, five-finger patterns, major scales and triads, elementary repertoire from the Baroque, Classical, Romantic, and Contemporary periods, sight reading, and transposition. Equivalent to TAG OAH019 Course 1 of 2.	**MUS 1152. Piano Class II (II; 1)** This course will cover fundamentals of notation, rhythmic studies in clapping, elementary keyboard technique, major and minor sales, chord progressions, triads and inversions, late beginner to early intermediate-level repertoire covering the Baroque, Classical, Romantic and Contemporary periods, sight reading, harmonization, and

		transposition. Prerequisite: MUS 1151. Equivalent to TAG OAH019 Course 2 of 2.
MUS 1157. University Singers (I, II; 1) Choral ensemble of 20 to 30 selected voices. Study and performance of significant literature from Renaissance through contemporary styles. Study and performance of selected works by Black composers. Prerequisites: Audition and permission of the instructor. Equivalent to TAG OAH022	**MUS 1167. String Ensemble (On demand; 1)** An organization devoted to the study and performance of string ensemble literature of all periods and a number of cultures, including Western and non-Western music (with emphasis on standard repertory and on African and African American music). Open to all University students. Prerequisites: Audition and permission of the instructor.	**MUS 1177. Woodwind Ensemble (I, II; 1)** An organization devoted to the study and performance of woodwind ensemble literature of all periods and a number of cultures, including Western and non-Western music (with emphasis on standard repertory and on African and African American music). Open to all University students. Prerequisites: Audition and permission of the instructor
MUS 1178. Brass Ensemble (I, II; 1) An organization devoted to the study and performance of brass ensemble literature of all periods and a number of cultures, including Western and non-Western music (with emphasis on standard repertory and on African and African American music). Prerequisites: Audition and permission of the instructor.	**MUS 1179. Percussion Ensemble (I, II; 1)** An organization devoted to the study and performance of aural and written percussion ensemble literature of all periods and a number of cultures, including Western and non-Western music (with an emphasis on standard repertory and on African and African American music). Prerequisites: Audition and permission of instructor.	**MUS 1187. Jazz Ensemble (I, II; 1)** An organization devoted to the study and performance of jazz literature. Required of all jazz studies majors. Prerequisites: Audition and permission of the instructor.
MUS 1200. Introduction to Music Technology (I, II; 3) This class introduces technology used by professional musicians to compose, produce, and distribute music. It focuses on notation software, MIDI sequencing, multi-track recording, and the Digital Audio Workstation (DAW). These 253 courses also explores the physics of sound, critical listening, musical analysis, and generative music systems	**MUS 1301 Navigating the Music Industry (I and II; 3)** This class identifies and describes the methods and processes used to make money with music. It explores professional undertakings like commercial-music performance, media production, worship music services, artist promotion, and private instruction. This course also investigates the economic realities of the music industry and the entrepreneurial skills required to achieve success in this field.	**MUS 1500. Class Voice for Non-Music Majors (II; 2)** Study of fundamental classical voice technique, and development of rudimentary skills designed for students with no prior vocal instruction; breathing, resonance, registration, and performance of two songs.
MUS 1501, 1502. Principal Applied - Voice (I, II; 2-4) Development of vocal technique; proper command of posture, carriage, and breathing; improved ability in diction, resonance, and dynamics. Vocalizes by Baccar, Marzo, Concone and others; English song literature, folk songs, old Italian arias, simple oratorio. A German lieder and French art songs; simple operatic arias; art songs by Black composers, continued study of English songs. One-hour lesson per week and one hour laboratory period (Voice Studio Class) per week.	**MUS 1503, 1504. Secondary Applied - Voice (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor	**MUS 1521, 1522. Principal Applied - Piano (I, II; 2-4)** A one-hour lesson per week and practice as required. Major and minor scales and arpeggios for one octave; Pischna studies; Bach Little Preludes and Fugues, short works by Haydn, Mozart, Beethoven, Schumann, Bartok, or Prokofiev; pieces from advanced repertoire if the student has the facility and background. Prerequisite: Permission of instructor. Equivalent to TAG OAH020.
MUS 1523, 1524. Secondary Applied - Piano (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for	**MUS 1531, 1532. Principal Applied - Woodwinds (I, II; 2- 4)** Studies in all major and minor keys, including Klose, Lazarus and other representative and	**MUS 1533, 1534. Secondary Applied - Woodwinds (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for

non-majors. Prerequisite: Permission of instructor	appropriate repertoire. A one-hour lesson per week.	non-majors. Prerequisite: Permission of instructor.
MUS 1541, 1542. Principal Applied - Percussion (I, II; 2- 4) Scales, rudiments and studies of Harr, Schinstine, Yoder, Rothman, Cook, Stevens, and Stone; representative repertoire. A one-hour lesson per week.	**MUS 1543, 1544. Secondary Applied - Percussion (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 1551, 1552. Principal Applied - Guitar (I, II; 2-4)** Studies in fundamentals of guitar. Major scales in all positions. II, V, I progressions in major and minor keys. Repertoire from Ellington, Parker, and others. One one-hour lesson per week.
MUS 1553, 1554. Secondary Applied - Guitar (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 1561, 1562. Principal Applied - Jazz Bass (I, II; 2-4)** A one-hour lesson per week. Fundamentals of bass playing, scales, technique, and standard jazz repertoire.	**MUS 1563, 1564. Secondary Applied - Jazz Bass (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.
MUS 1571, 1572. Principal Applied - Trumpet (I, II; 2-4) A one-hour lesson per week and practice as required. Studies in all major and minor keys Arbans, Reinhardt, etc. Representative approach repertoire.	**MUS 1573, 1574. Secondary Applied - Trumpet (I, II; 1)** One thirty-minute lesson per 254 week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor	**MUS 1581, 1582. Principal Applied - Trombone (I, II; 2- 4)** Studies in all major and minor keys — Arbans, Reinhardt, etc. Representative approach repertoire. A one-hour lesson per week.
MUS 1583, 1584. Secondary Applied - Trombone (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 1591, 1592. Principal Applied - Tuba (I, II; 2-4)** Studies in all major and minor keys — Arbans, Reinhardt, etc. Representative approach repertoire. A one-hour lesson per week.	**MUS 1593, 1594. Secondary Applied - Tuba (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.
MUS 1601, 1602. Principal Applied - French Horn (I, II; 2-4) Studies in all major and minor keys. Representative approach repertoire. A one-hour lesson per week.	**MUS 1603, 1604. Secondary Applied - French Horn (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 1611, 1612. Principal Applied - Oboe (I, II; 2-4)** Studies in all major and minor keys. Representative approach repertoire. A one-hour lesson per week.
MUS 1613, 1614. Secondary Applied - Oboe (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 1621, 1622. Principal Applied - Strings (I, II; 2-4)** Major and minor scales and arpeggios, technical studies of Sevick, Wohlfart, Kayser, Mazas or Donte, and selected works from the literature for violin. A one-hour lesson per week and practice as required.	**MUS 1623, 1624. Secondary Applied - Strings (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.
MUS 2201. Music Theory III (I; 5) The objective of this course sequence (MUS 2201 and 2202) is the further development of a student's musical literacy. Students continue the study of the basics of music theory to increase their skill, speed, and mastery. Aural organizational skills are further developed through sight singing, dictation, and improvisational exercises that include chromaticism, chromatic harmony, modulation (to closely and distantly related keys), and atonality. The Western European compositional practices of the years 1800 through the	**MUS 2202. Music Theory IV (II; 5)** The objective of this course sequence (MUS 2201 and 2202) is the further development of a student's musical literacy. Students continue the study of the basics of music theory to increase their skill, speed, and mastery. Aural organizational skills are further developed through sight singing, dictation, and improvisational exercises that include chromaticism, chromatic harmony, modulation (to closely and distantly related keys), and atonality. The Western European compositional practices of the years 1800 through the	**MUS 2210. Jazz Band Lab (I, II; 1)** An organization devoted to the study and performance of jazz literature. Prerequisites: Audition and permission of the instructor.

early twentieth century are studied through the analysis (labeling of melodic and harmonic structures, modulations, etc.; and analysis of contrapuntal harmonic structures and forms) of representative compositions. Students write melodies, voice-leading exercises (including counterpoint), and other short compositions to explore and demonstrate an understanding of the contrapuntal and harmonic practice of the above-mentioned period. These skills and concepts are generalized and adapted to the study of related musical dialects from other cultures and time periods: i.e., jazz from 1940-1970, and African and African American traditional and popular music traditions. Prerequisite: MUS 1102. Equivalent to TAG OAH052.	early twentieth century are studied through the analysis (labeling of melodic and harmonic structures, modulations, etc.; and analysis of contrapuntal harmonic structures and forms) of representative compositions. Students write melodies, voice-leading exercises (including counterpoint), and other short compositions to explore and 255 demonstrate an understanding of the contrapuntal and harmonic practice of the abovementioned period. These skills and concepts are generalized and adapted to the study of related musical dialects from other cultures and time periods: i.e., jazz from 1940-1970, and African and African American traditional and popular music traditions. Prerequisite: MUS 2201. Equivalent to TAG OAH052.	
MUS 2215. Music for Early Childhood Education (I; 2) This course is designed to provide the early childhood teacher with an overview of the purposes and content of early childhood music programs. Topics include the nature of early musical responses, objectives, experience levels of the program, methods of teaching and materials. Observation of and participation in music teaching in early childhood centers are included in coursework. Not open to music majors for credit.	**MUS 2226. String Class (II; 2)** Techniques and fundamental problems in playing violin, viola, cello, and string bass: position, fingering and bowing. Four classes per week.	**MUS 2228. Brass Class (I; 2)** Techniques and fundamental problems in playing brass instruments. Principles of intonation, fingering, breathing, embouchure, and transposition.
MUS 2229. Percussion Class (II; 2) Techniques and fundamental problems in playing percussion instruments.	**MUS 2230. Voice Class (II; 2)** Study of fundamental voice elements, and development of elementary skills designed particularly for music education majors; problems of the unchanged, changing, and mature voice. Prerequisite: Permission of the instructor (if student is not music major).	**MUS 2231. Woodwind Class I (I; 2)** Techniques and fundamental problems in playing woodwind instruments. Principles of intonation, fingering, breathing, and embouchure are studied. Emphasis on clarinet and saxophone.
MUS 2232. Woodwind Class II (II; 2) Continuation of study from Woodwind Class I. Emphasis on flute and double reeds. Prerequisite: MUS 2231.	**MUS 2233. History of Jazz (I, II; 3)** This course follows the development of jazz from its roots to the present day. Includes study of ragtime, New Orleans jazz, Chicago jazz, swing, bebop, hard-bop, fusion, free jazz, and current trends. Special emphasis on the music of Louis Armstrong, Duke Ellington, Charlie Parker, Miles Davis, and John Coltrane.	**MUS 2236 (I, II; 3)** This class covers the computer applications used to produce, analyze, and assess music. It concentrates on notation software, music education tools, and computerized performance assessment. This course explores emergent technologies like artificial intelligence (AI) and brain-machine interfaces (BMIs) in the context of computer music.
MUS 2251. Piano Class III (I; 1) This course will cover fundamentals of notation: rhythmic studies in clapping; elementary keyboard technique; major,	**MUS 2252. Piano Class IV (II; 1)** This course will cover fundamentals of notation; Rhythmic studies in clapping; elementary keyboard technique; major,	**MUS 2262. Jazz Workshop (I, II; 1)** Emphasis on small group playing. Advanced improvisational problems and

minor, and chromatic scales; chord progressions; arpeggios; intermediate-level repertoire from Baroque, Classical, Romantic, and Contemporary periods; sight reading; harmonization; transposition; and open score. Prerequisite: MUS 1152.	minor, and chromatic scales; major and minor chord progressions; major and minor arpeggios; intermediate to advanced-intermediate level repertoire covering the Baroque, Classical, Romantic, and Contemporary periods; sight reading; harmonization; transposition; and open score. Prerequisite: MUS 2251.	group dynamics. Prerequisites: Audition and permission of the instructor.
MUS 2271. Jazz Keyboard Harmony I (I; 2) Major modes, diatonic sevenths, chord extensions, and altered dominants as applied to the keyboard. Keyboard practice in shell voicing, II-V-I's, the blues progression, and turnarounds.	**MUS 2272. Jazz Keyboard Harmony II (II; 2)** Four and five-note voicing; tritone substitution; application of jazz keyboard techniques to standard repertoire.	**MUS 2280. Introduction to Music Education (I; 3)** This course covers music education at the pre-kindergarten through secondary levels. Topics include history and philosophy of music education; influences of philosophies of general education past and present; issues relevant to music education in pre-kindergarten through secondary education; the objective and structure of school music programs at various levels; and the relationship to school structures at the pre-kindergarten, elementary, and secondary levels. Directed classroom observations in pre-schools and elementary schools will be offered.
MUS 2301. Music Publishing, Marketing, and Networking (I, II; 3) This class outlines the strategies used for publishing, marketing, and networking music. It discusses the practice of developing and maintaining an online presence, and it introduces the methods of presenting and selling media objects.	**MUS 2302. Audio Recording (I, II; 3)** This class investigates the tools and techniques used to record, mix, and finalize professional audio. It is designed to acquaint students with the microphone procedures utilized in capturing and producing music, speech, and sound effects. This class also inspects the Digital Audio Workstation (DAW) and its proper use in capturing, refining, and finalizing media objects like songs, podcasts, and sound designs	**MUS 2501, 2502. Principal Applied - Voice (I, II; 2-4)** Technical studies; improvement in dynamics and range; studies in coloratura; oratorio arias by J. S. Bach, Handel, and Haydn; songs by Mozart and Gluck; German lieder and French art songs; simple operatic arias; art songs by Black composers; and continued study of English songs. One-hour lesson per week and one hour laboratory period (Voice Studio Class) per week. Prerequisite: MUS 1502. Equivalent to TAG OAH020.
MUS 2503, 2504. Secondary Applied - Voice (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 2521, 2522. Principal Applied - Piano (I, II; 2-4**) A one-hour lesson per week and practice as required. Major and minor scales; arpeggios in faster tempo; Bach French suites; three-part inventions; sonatas by Scarlatti, Haydn, and Mozart; a Beethoven sonata movement; Brahms Intermezzo; impressionistic and modern works; and advanced works. Prerequisite: MUS 1522. Equivalent to TAG OAH020	**MUS 2523, 2524. Secondary Applied - Piano (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.
MUS 2531, 2532. Principal Applied - Woodwinds (I, II; 2- 4) Continued study of tone production, scales, and repertory. A one-hour lesson per week. Prerequisite: MUS 1532.	**MUS 2533, 2534. Secondary Applied - Woodwinds (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 2541, 2542. Principal Applied - Percussion (I, II; 2- 4)** Continuation of MUS 1542. A one-hour lesson per week. Prerequisite: MUS 1542.

MUS 2543, 2544. Secondary Applied - Percussion (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 2551, 2552. Principal Applied - Guitar (I, II; 2-4)** One-hour lesson per week. Prerequisite: MUS 1552.	**MUS 2553, 2554. Secondary Applied - Guitar (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.
MUS 2561, 2562. Principal Applied - Jazz Bass (I, II; 2-4) A one-hour lesson per week. Prerequisite: MUS 1562.	**MUS 2563, 2564. Secondary Applied - Jazz Bass (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 2571, 2572. Principal Applied - Trumpet (I, II; 2-4)** A one-hour lesson per week and practice as required. Technique from Arbans, Reinhardt, etc. Representative approach repertoire. Continued study of tone production, scales, tonguing with various 257 articulations, and repertory. Prerequisite: MUS 1572.
MUS 2573, 2574. Secondary Applied - Trumpet (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor	**MUS 2581, 2582. Principal Applied - Trombone (I, II; 2- 4)** Continued study of tone production, scales, tonguing with various articulations, and repertory. A one-hour lesson per week. Prerequisite: MUS 1582	**MUS 2583, 2584. Secondary Applied - Trombone (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor
MUS 2591, 2592. Principal Applied - Tuba (I, II; 2-4) Continued study of tone production, scales, tonguing with various articulations, and repertory. A one-hour lesson per week. Prerequisite: MUS 1592.	**MUS 2593, 2594. Secondary Applied - Tuba (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 2601, 2602. Principal Applied - French Horn (I, II; 2-4)** Continued study of tone production, scales, tonguing with various articulations, and repertory. A one-hour lesson per week. Prerequisite: MUS 1602.
MUS 2603, 2604. Secondary Applied - French Horn (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 2611, 2612. Principal Applied - Oboe (I, II; 2-4)** Continued study of tone production, scales, and repertory. A one-hour lesson per week. Prerequisite: MUS 1612.	**MUS 2613, 2614. Secondary Applied - Oboe (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.
MUS 2621, 2622. Principal Applied - Strings (I, II; 2-4) Continued development of major and minor scales and arpeggios, technical studies of Sevick, Wohlfart, Kayser, Mazas or Donte, and selected works from the literature for violin. A one-hour lesson per week and practice as required. Prerequisite: MUS 1622.	**MUS 2623, 2624. Secondary Applied - Strings (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 2701. Global Perspectives in the Performing Arts (On Demand; 2)** The objective of this course is for students to become knowledgeable in the musical customs and practices of a specified international region (or regions) through study, firsthand observation, and performance in the region. Students learn the basic music history of the region (such as composers, songs, operas, musical styles, socio-economic influences, etc.) to understand the region's traditions and contributions to global music. Through cultural exchanges with local musicians and organizations, students' knowledge of the region is enhanced through performances, workshops, and/or discussions. The students' final project is a performance of traditional American music coupled with the host region's music in a full concert or concepts. Prerequisites; permission of the

		instructor.

MUS 2801. Music Publishing, Marketing, & Networking I (I and II; 3) This class outlines the strategies used for publishing, Marketing, and networking music. It discusses the practice of developing and maintaining an online presence, and it introduces the methods of presenting and selling media objects.	**MUS 3301. Diction for Singers (On demand; 3)** Study of phonetics as related to singing in Italian, French, and German.	**MUS 3303. Diction for Singers I (I; 2)** Study of phonetic alphabets and pronunciations as related to singing in Italian and German
MUS 3305. Diction for Singers II (I; 2) Study of phonetic alphabets and pronunciations as related to singing in French and English.	**MUS 3311. Jazz Composition and Arranging I (I; 3)** Study of chord, scale, and voicing concepts in the jazz idiom with application to composing for the small jazz combo (1-4 horns). Composing in standard forms 258 such as blues, AABA, and rhythm changes.	**MUS 3312. Jazz Composition and Arranging II (II; 3)** Analysis of modern compositions by Wayne Shorter, John Coltrane and others. Writing for the big band including close position, open position, shout choruses, and full ensemble.

MUS 3340. African Ethnomusicology (II; 2) Area studies from a socio-historical perspective. Students will examine African music in its cultural context, listen to and analyze various African musical styles in the global context, and do independent research and presentations. Prerequisite: MUS 1140	**MUS 3341. Conducting Fundamentals and Practice (I; 2)** The introduction and study of score reading and of fundamental conducting techniques: basic beat patterns, baton techniques, cueing entrances, up beats, independence of the hands, instrument and voice ranges, clef reading, transpositions, etc. The student will develop a clear and concise conducting technique and will begin to study the communication of musical expression through eye contact and appropriate hand gestures, rehearsal, and score preparation skills and techniques. Wind ensemble, band, choral, and orchestral literature is studied, analyzed, and prepared for performance. Leadership skills appropriate for working with elementary, secondary; college and professional ensembles are discussed and developed. Prerequisite: MUS 2202.	**MUS 3342. Advanced Choral Conducting (I; 2)** Students develop and demonstrate advanced conducting, rehearsal, and score preparation skills and techniques. Choral literature is studied, analyzed, and prepared for performance. Students will have the opportunity to conduct one of the University's choirs. Prerequisite: MUS 3341.
MUS 3343. Advanced Instrumental Conducting (II; 2) Students develop and demonstrate advanced conducting, rehearsal, and score preparation skills and techniques. Wind ensemble, band, choral, and orchestral literature is studied, analyzed, and prepared for performance. Students will have the opportunity to conduct one of the University's ensembles. Prerequisite: MUS 3341.	**MUS 3374. Studies in Piano Literature (On-Demand: 2)** This course exposes students to the standard pieces of solo and chamber repertoire from all historic periods. It focuses on enhancing ability to aurally and visually identify repertoire through stylistic characteristics and common compositional devices. Topics will vary	**MUS 3375. Band and Orchestra Literature and Arranging (II; 4)** This course involves exposure to the graded performance literature appropriate for school instrumental groups of all sizes in grades 5 through 12; the various ensemble training materials available for school groups; and appropriate solo and training literature for teaching individual performers. Students learn to write, arrange, and score music for wind ensemble, concert band, and orchestra. Instrument ranges, characteristics, idiosyncrasies, and technical difficulties are studied. Articulations, bowings, tempo indications, dynamics and other

		appropriate descriptors of phrasing and expression are learned and applied in the production of musical scores. Piano scores are analyzed as to form, content, and expression; arrangements for large ensembles are produced that are musically and aesthetically faithful to the composer's original intentions. Prerequisites: All instrument classes except Advanced Instrument Conducting.

MUS 3376. Instrumental Methods (II; 2) This course involves methods and techniques of teaching instrumental music for grades 5 through 12, and methods and techniques for organizing, developing, and financing school instrumental groups for grades 5 through 12. Other topics include classroom management skills; interpersonal relationships; evaluation of students; and use of appropriate media with instrumental groups. Field based/clinical activities will be offered. Prerequisite: Pass Praxis I; All instrument classes or permission of instructor.	**MUS 3381. Music History I (I; 3)** This course traces the beginnings of music in antiquity through the development of medieval monophony and polyphony, Burgundian and Renaissance techniques and composers, the influence of the reformation on Music, and the Baroque era (in both instrumental and vocal music). Prerequisite: ENG 1102 and MUS 2202.	**MUS 3382. Music History II (II; 3)** The course continues the 259 study of the history of music, beginning with the rise of the classical era and composers of the first Viennese School, and continuing through Romanticism into the modern era (including twentieth century composers and techniques). Prerequisites: MUS 2202; MUS 3381
MUS 3386. Area Studies in Ethnomusicology (I; 2) A socio-anthropological study of African American music in the diaspora and the resulting genres, styles, and forms of musical expression that developed from the synthesis of African and Western musical traditions. The course begins with fundamental ethnomusicology theory and methodology as applied to the study of non-Western music. Prerequisite: MUS 2251.	**MUS 3391. Jazz Improvisation I (I; 2)** Study of chord and scale concepts used in the jazz idiom. Emphasis on modes of the major scale, diatonic seventh chords in major and minor, the blues progression and scale, development of II-V techniques, and dominant chord scales.	**MUS 3392. Jazz Improvisation II (II; 2)** Development of standard repertoire from the bebop era. Advanced improvisational techniques including use of pentatonic, scales in fourths, and melodic minor modes. Emphasis on post-bebop styles for the second part of the semester.
MUS 3395. Chamber Music (On demand; 1) Two one-hour studio sessions per week with chamber music coach. Each student will learn and perform in recital at least one selection from the standard chamber music repertoire. Prerequisite: Permission of instructor.	**MUS 3397. Junior Recital and Research (I, II, III; 3)** Required for B.M. in Performance degree only. Prerequisite: Audition and permission of the instructor.	**MUS 3482. Music Methods & Materials for Music Majors: Elementary (I; 3)** This course includes practical experience with various methods and materials at the pre-kindergarten and elementary levels; experiences with various instruments; multicultural content; music classroom management skills, interpersonal skills, reading in the content area, evaluation of students, media and technology appropriate for teaching elementary music. Field-based/clinical experiences will be provided. Prerequisites: MUS 2280; pass Praxis I; or permission of instructor
MUS 3495. Junior Recital (On Demand; 0) Public performance of junior level repertoire developed in the Principal	**MUS 3501, 3502. Principal Applied - Voice (I, II; 2-4**) Stability and consistent quality in the upper and lower vocal	**MUS 3503, 3504. Secondary Applied - Voice (I, II; 1)** One thirty-minute lesson per week and practice as required.

Applied Sequence. Required for all B.M. degrees at CSU. Prerequisite: Permission of instructor.	registers. Continuation of advanced German lieder and French art songs; simple art songs by Black composers; operatic arias; contemporary songs; Russian songs to be sung in English. One-hour lesson per week and one hour laboratory period (Voice Studio Class) per week. Prerequisite: MUS 2502.	Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor

MUS 3521, 3522. Principal Applied - Piano (I, II, 2-4) A one-hour lesson per week and practice as required. All major and white key (harmonic and melodic) scales, 3 octaves, metronome 108 in quarter, eighth, and triplet notes; all major and minor triad arpeggios and dominant and diminished seventh chord arpeggios, 3 octaves, metronome 108 in quarter, eights, and triplet notes; 3 pieces from the standard repertoire per semester. Prerequisites: MUS 2522 and completion of Junior Recital.	**MUS 3523, 3524. Secondary Applied - Piano (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 3531, 3532. Principal Applied - Woodwinds (I, II; 2- 4)** Continued study of tone production, scales, repertory. A one-hour lesson per week. Prerequisite: MUS 2532
MUS 3533, 3534. Secondary Applied - Woodwinds (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor	**MUS 3541, 3542. Principal Applied - Percussion (I, II; 2- 4)** Continuation of MUS 2542. 260 A one-hour lesson per week. Prerequisite: MUS 2522.	**MUS 3543, 3544. Secondary Applied - Percussion (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.
MUS 3551, 3552. Principal Applied - Guitar (I, II; 2-4) A one-hour lesson per week. Prerequisite: MUS 2552.	**MUS 3553, 3554. Secondary Applied - Guitar (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 3561, 3562. Principal Applied - Jazz Bass (I, II; 2-4)** A one-hour lesson per week. Prerequisite: MUS 2562.
MUS 3563, 3564. Secondary Applied - Jazz Bass (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 3571, 3572. Principal Applied - Trumpet (I, II; 2-4)** A one-hour lesson per week and practice as required. Technique from Arbans, Reinhardt, etc. Representative approach repertoire. Continued study of tone production, scales, tonguing with various articulations; repertory. Prerequisite: MUS 2572.	**MUS 3573, 3574. Secondary Applied - Trumpet (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.
MUS 3581, 3582. Principal Applied - Trombone (I, II; 2- 4) Continued emphasis on legato study and breath control, more advanced technical studies, and scales — Williams, Arbans, etc. — or equivalent repertory. A one-hour lesson per week. Prerequisite: MUS 2582.	**MUS 3583, 3584. Secondary Applied - Trombone (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for nonmajors. Prerequisite: Permission of instructor	**MUS 3591, 3592. Principal Applied - Tuba (I, II; 2-4)** Continued emphasis on legato study and breath control, more advanced technical studies, and scales — Williams, Arbans, etc. — or equivalent repertory. A one-hour lesson per week. Prerequisite: MUS 2592
MUS 3593, 3594. Secondary Applied - Tuba (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for	**MUS 3601, 3602. Principal Applied - French Horn (I, II; 2-4)** Continued emphasis on legato study and breathe control, more advanced technical studies, scales, and repertory. A one-	**MUS 3603, 3604. Secondary Applied - French Horn (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for

non-majors. Prerequisite: Permission of instructor.	hour lesson per week. Prerequisite: MUS 2602.	non-majors. Prerequisite: Permission of instructor

MUS 3611, 3612. Principal Applied - Oboe (I, II; 2-4) Continued study of tone production, scales, repertory. A one-hour lesson per week. Prerequisite: MUS 2612.	**MUS 3613, 3614. Secondary Applied - Oboe (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor	**MUS 3621, 3622. Principal Applied - Strings (I, II; 2-4)** One-hour lesson per week. Prerequisite: MUS 2622.
MUS 3623, 3624. Secondary Applied - Strings (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 3750. Opera Workshop (II; 1)** Solo and ensemble study of singer-actor techniques through performance of opera and musical theatre works. Primarily for junior and senior vocal music majors. Open to all University students, including those skilled in theatrical technology, design, operation, costuming, properties, make-up, visual media, and promotion. Prerequisites: Audition and permission of the instructor	**MUS 4341. Form and Analysis (I; 2)** Students develop and demonstrate labeling and analytical techniques that are appropriate for the study of the disparate contrapuntal and harmonic structures found in 261 four periods of Western music: baroque, classical, romantic, and twentieth century. The analytical techniques are adapted to the study of a representative sample of the music of other cultures, and of a representative sample of Western music before 1600. Students will write critical analyses of several extended compositions. Prerequisite: MUS 2202.
MUS 4342. Counterpoint (II; 2) The art of combining melodies in the style of 18th century tonal counterpoint using a specially adapted species of counterpoint pedagogy. Prerequisite: MUS 2202.	**MUS 4400. Studies in Pedagogy (On demand; 2)** An individualized study of the pedagogical materials and techniques used in a student's principal applied area. Topics include textbook evaluations, current periodicals, group and private lessons, standard technique and repertoire, and the business aspects of music teaching as a profession.	**MUS 4427. Small Ensemble (I, II; 1)** Two one-hour studio classes per week with the chamber music coach. Each student will learn and perform a student recital of at least one piece from the standard chamber music repertoire. Pieces learned will depend on the instrument of those who register. Prerequisites: Audition and permission of the instructor.
MUS 4428. Steel Band (I, II; 1) An organization devoted to the study and performance of the music of the Caribbean Islands on the steel drums. Prerequisites: Audition and permission of the instructor.	**MUS 4430. Topics in Solo and Ensemble Literature (On Demand; 2)** This course will study the solo and ensemble literature of the instruments identified for the term (brass, woodwinds, percussion or strings.) the instrument(s) for the term will be chosen to support the needs of the BM in Performance. Differing sections will emphasize different instrumental families. By permission of instructor. Prerequisites: Permission of the instructor.	**MUS 4476. Choral Methods (I; 2)** The course involves in-depth learning methods and techniques in teaching secondary choral groups; organizing school choral groups; classroom management skills; interpersonal skills; and evaluating vocal performance (solo, ensemble, and choral). Field-based/clinical experiences will be provided. Prerequisites: MUS 2230 and MUS 3342.
MUS 4477. Choral Literature and Arranging (II; 2) The course involves the study of literature for individual voices, small ensembles, and large ensembles appropriate for secondary choral programs; study of appropriate training materials for secondary choral groups; and basic arranging skills of music appropriate for secondary choral groups. Prerequisites: MUS 2230 and MUS 3342.	**MUS 4479. Music Methods and Materials: Secondary — Field-Based Experiences (II; 1)** The field-based/clinical experiences component of the secondary methods and materials class. Includes actual observations and hands-on experiences of the total contemporary music educational program in area public schools. FBEs enable students to develop and to gain a	**MUS 4482. Music Methods and Materials for Music Majors: Secondary (II; 3)** This course involves the study of methods, materials and organization of secondary nonperforming music programs with a brief overview of choral programs. Other topics will include music classroom management techniques; interpersonal skills; evaluation of students; reading in the content area;

	sense of the full range of teacher responsibilities that is consistent with NASM and NCATE standards. Corequisite: MUS 4480; Prerequisites: MUS 2280; Pass Praxis I.	and appropriate media for non-performing music classes. Field-based clinical experience will be provided. Prerequisites: MUS 2280; pass Praxis I or permission of instructor.
MUS 4490. Recording Studio Practicum (II; 3) Seniors in the jazz studies major learn basic recording techniques to produce a jazz recording of their own performance. Along with Senior Recital, this is a capstone experience for jazz studies majors. Prerequisite: Permission of the instructor	**MUS 4495. Senior Recital (I, II; 0)** Capstone experience for all Principal Applied sequences. Must pass full faculty hearing two weeks prior to performance date.	**MUS 4497. Senior Recital and Research (I, II; 3)** Required for capstone experience for B.M. in Performance degree only. Prerequisite: Audition and permission of the instructor
MUS 4501, 4502. Principal Applied - Voice (I, II; 2-4) Stability and consistent quality in the upper and lower vocal registers. Continuation of advanced German lieder and French art songs; simple art songs by Black composers; operatic arms; contemporary songs; Russian songs to be sung in English. One-hour lesson per week and one hour laboratory period (Voice Studio Class) per week. Prerequisites: MUS 3502 and completion of Junior Recital.	**MUS 4503, 4504. Secondary Applied - Voice (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 4510. Vocal Literature (On Demand; 2)** This course exposes students to the standard repertoire of solo and chamber vocal music from all historical periods. It focuses on enhancing the ability to aurally and visually identify repertoire through stylistic characteristics and common compositional devices. The course also discusses performance practices for different styles. Prerequisite: Permission of instructor.
MUS 4521, 4522. Principal Applied - Piano (I, II; 2-4) A one-hour lesson per week and practice as required. Completion of Beethoven sonata; Bach well-tempered clavier, Vol. 1; Chopin etudes, polonaises, recital preparation. Note: Works of quality and grade of difficulty comparable to the titles listed may be substituted. Prerequisites: MUS 3522 and completion of Junior Recital.	**MUS 4523, 4524. Secondary Applied - Piano (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor	**MUS 4531, 4532. Principal Applied - Woodwinds (I, II; 2- 4)** Studies in all major and minor keys — Klose, Lazarus, and other representative appropriate repertoire. A one-hour lesson per week. Prerequisites: MUS 3532 and completion of Junior Recital.
MUS 4533, 4534. Secondary Applied - Woodwinds (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 4541, 4542. Principal Applied - Percussion (I, II; 2- 4)** Continuation of MUS 3542. A one-hour lesson per week. Prerequisites: MUS 3542 and completion of Junior Recital.	**MUS 4543, 4544. Secondary Applied - Percussion (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.
MUS 4551, 4552. Principal Applied - Guitar (I, II; 2-4) A one-hour lesson per week. Prerequisites: MUS 3552 and completion of Junior Recital.	**MUS 4553, 4554. Secondary Applied - Guitar (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 4561, 4562. Principal Applied - Jazz Bass (I, II; 2-4)** A one-hour lesson per week. Prerequisites: MUS 3562 and completion of Junior Recital.
MUS 4563, 4564. Secondary Applied - Jazz Bass (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 4571, 4572. Principal Applied - Trumpet (I, II; 2-4)** A one-hour lesson per week and practice as required. Technique from Arbans, Reinhardt, etc. Representative approach repertoire. Continued study of tone production, scales, tonguing with various articulations; repertory. Prerequisites:	**MUS 4573, 4574. Secondary Applied - Trumpet (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.

	MUS 3572 and completion of Junior Recital.	
MUS 4581, 4582. Principal Applied - Trombone (I, II; 2- 4) A one-hour lesson per week and practice as required. Preparation of Senior Recital repertoire. Prerequisites: MUS 3582 and completion of Junior Recital.	**MUS 4583, 4584. Secondary Applied - Trombone (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor	**MUS 4591, 4592. Principal Applied - Tuba (I, II; 2-4)** A one-hour lesson per week and practice as required. Senior Recital preparation. Prerequisites: MUS 3592 and completion of Junior Recital.
MUS 4593, 4594. Secondary Applied - Tuba (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 4601, 4602. Principal Applied - French Horn (I, II; 2-4)** A one-hour lesson per week. Continued development of technique and repertoire. Preparation of Senior Recital repertoire. Prerequisites: MUS 3602 and completion of Junior Recital.	**MUS 4603, 4604. Secondary Applied - French Horn (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.
MUS 4611, 4612. Principal Applied - Oboe (I, II; 2-4) Continued study of tone production, scales, repertory. A one-hour lesson per week. Prerequisites: MUS 3612 and completion of Junior Recital.	**MUS 4613, 4614. Secondary Applied - Oboe (I, II; 1)** One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.	**MUS 4621, 4622. Principal Applied - Strings (I, II; 2-4)** A one-hour lesson per week and practice as required. Preparation of Senior Recital repertoire. Prerequisites: MUS 3622 and completion of Junior Recital.
MUS 4623, 4624. Secondary Applied - Strings (I, II; 1) One thirty-minute lesson per week and practice as required. Technique and repertoire appropriate for non-majors. Prerequisite: Permission of instructor.		

NUCLEAR ENGINEERING

NUE 2720. Introduction to Nuclear Engineering (I; 3) Discussion of nuclear energy and nuclear radiation sources, methods of measurement and utilization of nuclear radiation, and projections for future engineering uses. Laboratory experiments and field trips. Laboratory experiments to be conducted at OSU Nuclear Reactor Laboratory. Field trips to Nuclear Power Plants. A Memorandum of Understanding to collaborate has been executed with OSU and Wilberforce University. Prerequisites: MTH 2503 or permission of the instructor	**NUE 2850. Field Practicum in Nuclear Engineering (I, II; 3)** Industrial experiences will be provided during mandatory field trips on three weekends to three Nuclear Operating Companies of eight-hour duration and during two weekday trips to The Ohio State University Nuclear Reactor Laboratory. The trips occur in the Fall and Spring semesters of the first year of the minor in Nuclear Engineering. Laboratory and hands-on experiences at the following facilities will be provided: (1) Perry Nuclear Power Plant, (2) the Dave Beese Nuclear Power Plant, (3) the Westinghouse Nuclear Training Center, and (4) The Ohio State University Nuclear Reactor Facility, a total of 45 hours.	**NUE 3555. Nuclear Safety Systems (II; 3)** Reactor safety concepts. Lecture/ discussion/ distance and traditional learning modalities. Sandia Lab NUREG/CR-6042 code utilized at the NRC would be utilized in the course. Example case study problems and solutions. Prerequisite: NUE 2720 or permission of instructor
NUE 3775. Power Plant Systems Operations (II; 3) Power plant studies, regulatory requirements, and integrated plant operations; brief overview of thermal and mechanical design aspects and economics of nuclear power plants	**NUE 3820. Reactor Core Neutronics (I; 3)** Reactor vessel subatomic particle dynamics for energy generation, containment, and distribution. The focus is on methods for the design and analysis of nuclear reactor cores. Includes both	

and processes. The thermodynamics of operating nuclear power plants (BWR and PWR) are discussed. Field trips to Nuclear Power Plants will be provided. Prerequisite: NUE 2720 or permission of instructor.	time dependent and steady state analysis. Prerequisites: NUE 2720 and NUE 3775 or permission of instructor.	

PHILOSOPHY AND RELIGION

PHI 2210. Survey of Global Philosophy (I, II; 3) Students analyze some of the major problem areas of philosophy from a global perspective and in 264 a range of time periods. Problems covered include freedom, religion, knowledge, and value.	**PHI 2220. Introduction to Hip-Hop Philosophy (I; 3)** Students are introduced to the major themes and thinkers in Africana philosophy through the lens of hip-hop culture. Students explore and respond to theories of knowledge, value, and being as they are articulated by key philosophical and artistic figures.	**PHI 2230. Global Religion (II; 3)** Students consider the origins and development of religion on a global basis, with particular attention to the interrelations of beliefs, ritual practices, and values.
PHI 2240. Critical Thinking (I, II; 3) Students cover the basics of logic, argumentation, and problem solving with emphasis on applications of logic in reading and writing, including the recognition, evaluation, and construction of arguments.	**PHI 2250. Applied Ethics (I; 3)** Students apply ethical theory to a range of contemporary personal, social, and professional issues. The role of ethics in community life is explored and the sources of values, norms and principles are investigated.	**PHI 3200. Environmental Ethics (I, II, III; 3)** This course provides an overview of the philosophical and ethical dimensions of the environmental crisis, including environmental politics, animal rights, and nonwestern views. This course will cover the main schools of thought in environmentalism from the pro-corporate wise use through to the most radical pro environmental stances with the intent being not only to produce a better understanding but also to provide various tools/solutions. Prerequisite: PHI 2240.
PHI 3250. Ethics of Digital Culture (On-demand; 3) Students investigate ethical challenges emerging from digital innovation in social, political, and economic spheres. Specific technologies are analyzed within the context of social values including privacy, security transparency, equity, sustainability rights, and justice.	**PHI 3300. Logic and Scientific Method (II; 3)** Students learn the basics of symbolic logic and investigate how logic is applied in the social and natural sciences	**PHI 3310. Global Philosophy to 1500 (I; 3)** Students trace the development of philosophy from the ancient world until the beginning of the modern age from a global perspective.

PHI 3311. Global Philosophy: 1500-Present (II; 3) Students trace the development of philosophy from 1500 to the present from a global perspective.	**PHI 3315. African Philosophy (I; 3)** Students consider various accounts of the origins of African Philosophy in ancient Egypt as well as the more recent development of African Philosophy as an academic discipline since the 1960s.	**PHI 3320. Philosophy of Religion (II; 3)** Students investigate the nature and role of religion, including problems of religious knowledge and experience. Attention is paid to the impact of liberation theology on traditional religious thinking.
PHI 3330. African and African American Religion (I; 3) Students examine religion in various African cultures prior to contact with Islam and Christianity, trace recent developments in African Religion and study the origins and history of religious institutions and traditions among African Americans.	**PHI 3350. African American Philosophy (II; 4)** Students engage in philosophical analysis of African American thought from colonial times through the present. Movements, tendencies and individual thinkers are covered. The concepts of oppression and liberation are central to the course.	**PHI 3360. Philosophy of Science (I; 3)** Students inquire into the concepts and methods of science and investigate the relationship of science to other aspects of human culture.
PHI 3400. Topics in Philosophy and Religion (On demand; 3) Students investigate some topic or interrelated set of topics in philosophy and/or religion. The course is intended primarily for philosophy minors.	**PHI 3500. Disciplines Within Philosophy (I, On Demand; 3)** This is an advanced course that provides deep analysis into the various disciplines/schools of thought within Philosophy. This course is writing intensive. Prerequisites: PHI 2240 or PHI 2210.	**PHI 4895. Senior Thesis (On demand; 3)** Philosophy minors complete and defend undergraduate theses that demonstrate competency in the student's major field and in the relevant skills and knowledge of the general education program. Recommended for students considering graduate or professional school. Prerequisites: Senior status and philosophy minor

PHYSICS

PHY 1110. Physical Science (I, II; 3) A course designed to inform and interest students in the role of science in everyday life. The basic concepts of chemistry, physics and the philosophy of science are presented as an interrelated whole. Open to all students. May be used to satisfy the General Education requirements for Natural Sciences.	**PHY 1120. Physical Science (I, II; 3)** This course introduces the basic principles and concepts of chemistry and physics and is designed to give the students an appreciation of science in a technological society. The course does not require any previous science background, but a working knowledge of high school mathematics is useful. Open to all students. May be used to satisfy the General Education requirements for Natural Sciences.	**PHY 1140. Experimental Science (I; 2)** A course intended to give students a free rein to their scientific curiosity in an open ended and flexible set of laboratory problem situations. Emphasis will be on tackling any problem in a spirit of inquiry but not on covering any prescribed subject matter. While this course is not an integral part of departmental or preprofessional curriculum or prerequisite to any other courses, it is intended for freshmen who expect to major in one of the natural sciences. One two-hour laboratory and one one-hour discussion session per week.

PHY 1160. The Physics of Sound with Lab (II; 3) An investigation of the physical phenomenon of sound. The treatment of sound waves is applied to musical instruments. This course is designed for music majors or other nonscience majors. One two-hour laboratory and two one-hour lecture per week. May be used to satisfy the General Education requirements for Natural Sciences.	**PHY 1170. The Visual Image with Lab (I; 2)** A nonmathematical course that describes light, its behavior and applications. Emphasis is placed on image formation by optical instruments, the science of color, lasers, holography, and analysis of light from the elements, planets and stars. One two-hour laboratory and one one-hour discussion session per week.	**PHY 1181. Basic Physics I (I; 4)** This is the first of a two-semester course sequence, taught only in Fall. It will cover the following concepts: Newton's laws of motion; work, energy and power; conservation laws of energy, linear momentum and angular momentum; Archimedes's and Bernoulli Principles; specific heat and latent heats; wave motion and sound; Doppler Effect. The course will be taught using two two-hour inquiry-based laboratory instruction periods (hands-on), and two one hour of lecture/recitation per week. Prerequisites: MTH 1750.
PHY 1182. Basic Physics II (II; 4) This is a continuation of PHY 1181 and will be offered in spring. This course will cover the following concepts: electrical charges at rest and in motion; Ohm's law and its application to simple circuits; magnetic forces and fields; electromagnetic induction and its applications; electromagnetic spectrum; geometric optics; physical optics; and structures of the atom and the nucleus. The course will be taught using two two-hour periods of inquiry-based laboratory instruction (hands-on), and two hour of lecture/recitation per week. Prerequisites: PHY 1181.	**PHY 1183. Introductory Astronomy (I; 2)** A basic course in astronomy that covers the following concepts: major theories of the origin and structure of the universe; astronomical units; the solar system; characteristics of the sun and the source of its energy; eclipses; the earth's seasons; units of time as based on the earth's motion; space exploration and celestial navigation; and remote sensing.	**PHY 2411. University Physics I (I; 5)** This course begins with a two-semester sequence of introductory calculus-based physics courses. It covers the fundamentals of classical mechanics, gravitation, properties of solids and fluids, and thermodynamics. It is required for majors in biology, chemistry, environmental engineering, and manufacturing engineering. There are four one-hour lectures and one two-hour laboratory exercise per week. Prerequisite: MTH 2503.
PHY 2412. University Physics II (II; 5) This course completes a two-semester sequence of introductory calculus-based physics courses. It covers the fundamentals of wave motion, electrodynamics, optics, nuclear physics and modern physics. It is required for majors in biology, chemistry, environmental engineering, and manufacturing engineering. There are four one-hour lectures and one two-hour laboratory exercise per week. Prerequisite: PHY 2411	**PHY 2611. College Physics I (I; 4)** This course begins a two-semester sequence of introductory algebra-based physics courses. It covers the fundamentals of classical mechanics, gravitation, properties of solids and fluids, thermodynamics, and wave motion. It is required for majors in water resources management, 266 sustainable agriculture, and education. There are three one-hour lectures and one two-hour laboratory exercise per week. Prerequisite: MTH 2501. Equivalent to TAG OSC 021 (Combination of OSC 014 and OSC 015).	**PHY 2612. College Physics II (II; 4)** This course begins a two-semester sequence of introductory algebra-based physics courses. It covers the fundamentals of electrodynamics, optics, nuclear physics, and modern physics. It is required for It is required for majors in water resources management, sustainable agriculture, and education. There are three one-hour lectures and one two-hour laboratory exercise per week. Prerequisite: PHY 2611 Equivalent to TAG OSC 021 (Combination of OSC 014 and OSC 015).
PHY 3230. Electronics for Scientists (I; 2) This course deals with modern electronics instrumentation in the laboratory. Prerequisite: PHY 2411.	**PHY 3320. Physical Optics (I; 3)** The course treats the fundamentals of physical optics including interference, dispersion, diffraction, double refraction, and polarization. Prerequisite: PHY 2611.	**PHY 3330. Introductory Solid State Physics (II; 4)** This course deals entirely with the ordered crystalline structures of the solid state and covers crystallography, lattice dynamics, energy bands, semiconductors, and superconductivity. Prerequisite: PHY 2611.

PHY 4401. Electricity and Magnetism I (I; 3) A course covering the fundamentals of electricity and magnetism. Prerequisite: PHY 2611.	**PHY 4402. Electricity and Magnetism II (II; 3)** Continuation of the fundamentals of electricity and magnetism. Prerequisite: PHY 4401.	**PHY 4421. Analytical Mechanics I (1; 3)** An introduction to the classical theory of statics and dynamics of particles and rigid bodies. Prerequisite: PHY 2411.
PHY 4422. Analytical Mechanics II (II; 3) A study of the Lagrange equations of motion and the Hamiltonian function. Prerequisite: PHY 4421.	**PHY 4431. Modern Physics (1; 3)** A course covering the modern concepts of atomic structure and radiation, nuclear structure, and radioactivity. Prerequisite: PHY 2611.	

POLITICAL SCIENCE

PSC 1100. American National Government (I, II; 3) A basic introductory course dealing with the Constitution, Congress, president, courts, political party system, civil rights, the relationships and obligations of citizenship, and the operation of government in the fields of foreign affairs, national defense, business and labor, agriculture and social welfare. Equivalent to TAG OSS011.	**PSC 1120. Introduction to Public Administration (I; 3)** An introduction to the environment of public administration through the study of organization, personnel administration, financial administration, administrative law and regulation, and administrative responsibility.	**PSC 1140. The Politics of Food & Farming in America (I; 3)** An introduction to the political environment of American food and farming with a focus on policymakers, interest groups, consumers and the institutions within which they operate.
PSC 2202. International Politics (I; 3) This course is concerned with the behavior and proclivities of nation-states in the international community. Topics considered include development of the state system, physical characteristics of	**PSC 2205. Introduction to Africa (I, II; 3)** This course provides students with an interdisciplinary survey of Africa, its people and cultures from the traditional era through European colonization to the present. Students will be briefly	**CRJ/PSC/PSY/SWK/SOC 2206.Statistics for Social and Behavioral Sciences (I, II; 4)** This course provides students with an introduction to basic statistical techniques used by researchers in the social and 267 behavioral sciences. Major

states, rights and duties of states, sovereignty of states, the doctrine of recognition, large and small states, power politics, and the balance of power mechanism. Equivalent to TAG OSS012.	introduced to ancient and medieval African societies; to the traditional African experience; to the forces of colonization and modernization which have brought about swift changes in societies and individuals; and to the reemergence of independent African nations since 1945.	topics include frequency distributions, measures of central tendency and variation, regression and correlation, and hypothesis testing. A computer lab is required with this course. Prerequisite: MTH 1750 or MTH 1550, grade "D" or better.
PSC 2223. Introduction to Political Science (II; 3) This course acquaints students with political science as a discipline. Subfields will be introduced, and students will become familiar with terms and concepts, such as democracy and justice, fundamental to the study of politics, with principal methods of study, and with the basic scientific method as it applies to political science.	**PSC 2405. Introduction to Comparative Politics (I, II; 3)** This course is an examination of select democratic, post-communist and developing world political systems. Political systems in Africa, Asia, Europe and Latin American will be considered. Equivalent to TAG OSS013.	**PSC 3304. American State and Local Government (I - Even Years; 3)** Study of the development, structure, and functions of problem-solving governments in an evolving federal system. Prerequisites: PSC 1100 and PSC 2223, or permission of the instructor. Equivalent to TAG OSS014.

PSC 3310. Public Policy Analysis (II - Odd Years; 3) The current research literature in policy analysis is reviewed. The applications of policy analysis are illustrated by use of specific cases, methodological procedures in policy analysis are analyzed and critiqued, and opportunity is afforded for research design.	**PSC 3311. International Relations of African States (II; 3)** A consideration of inter-state relations among postcolonial African states, and the relations between them and the world's core states. The course will include undergraduate level theories of core/periphery relationships in the field of international relations.	**PSC 3343.The Politics of Food & Farming in Urban Communities (II; 3)** Study of the political institutions, actors, interests, and processes that characterize urban governments, with a focus on farming and food. Prerequisites: PSC 1100, PSC 1120, or PSC 1140, or permission of instructor
PSC 3351. The American Presidency (I - Even Years; 3) A study of the institution and office of the presidency, with special emphasis on the interpretation of the office given to it by various presidents.	**PSC 3353. American Political Theory (I; 3)** An examination of leading American political beliefs and their adaptation in American political, social, and economic settings.	**PSC 3361. African American Politics (I; 3)** A course emphasizing the special problems of the African American politician and the special techniques and strategies of African American politics. The course will also emphasize the potential of African American politics.
PSC 3362. Political and Social Theory (II - Odd Years; 3) A systematic attempt to correlate the development of political, social, and economic thought from Plato to the 20th century. The contributions of individual writers are evaluated on the basis of selected readings.	**PSC 3365. Modern Political Ideologies (II; 3)** An examination of contemporary political beliefs and their development. Marxism and racism are considered as well as the development of Third World political philosophies in the pre- and post- independence periods.	**PSC 3371. United States Foreign Policy (I; 3)** This course begins with a consideration of the constitutional provisions regarding the making of foreign policy and explores the sources, makers, and content of United States foreign policy, with special emphasis on the role of domestic policies in its formation and execution.
PSC 3381. Constitutional Law (I - Even Years; 3) A study of the Constitution in operation, emphasizing the role of the Supreme Court in the evolution of constitutional theory and practice	**PSC 3390. Public Budgeting (I; 3)** An examination of the political and administrative processes of public budgeting as practiced by local, state, and national governments. Emphasis will be directed toward budgetary procedures, and the political variables impacting budgetary decisions in the public sector.	**PSC 3391. The American Legislature (I;3)** This course is an overview of the American national legislature. It will focus on the Congress as an institution, covering (1) its constitutional foundations, (2) its evolution and the role of 268 important actors/interests since the founding, (3) the interaction of the executive, legislature and judicial branches and the larger political environment, and (4) legislative policy output.

PSC 4450. Special Problems in Political Science (I, II; 3) An opportunity for advanced students to work independently on research projects. Prerequisite: Approval by department faculty.	**PSC 4493. Legal or Public Administration Internship (I, II; 5)** This is a course for students planning a career in law or public administration, and who have not participated in the University Co-op program. It is designed to give students a realistic look into law or public administration as a career by participating in varied actual experiences offered by an attorney or an agency to which each student is assigned. In addition to on-site work, students meet with the instructor for a one-hour seminar each week. Enrollment is limited to seven students per semester.	**PSC 4503. Human Resource Management in the Public Sector (II; 3)** Studies staffing, career development, wages and salary administration, motivation and productivity, separation, personnel organization, and how workforce management contributes to organizational success in government agencies.

PSC 4895. Senior Capstone Seminar (II; 3) The senior capstone seminar provides political science majors with a comprehensive examination of the history, evolution, and current state of political science as a social science discipline. In this process, students will consider the various subfields of political science. Students will design individual research projects within the structure of a seminar in which topic selection and appropriate research methods will be discussed. Required for all political science majors. Prerequisites: PSC 3381 and Senior standing.		

PSYCHOLOGY

PSY 1100. Freshman Seminar in Psychology (I, II; 1) General orientation to college and psychology as a profession. Emphasis is placed upon how psychologists answer questions, degree requirements, exposure to career and educational opportunities, and issues which need to be considered in psychology-related fields	**PSY 1200. Introduction to Psychology (I, II; 3)** This course presents an introduction to the science of psychology and human behavior. The course aim is to explore the science-based approach to psychology, applied theories such as learning and memory; sensation and perception; cognition; statistical analysis of behavior; social behaviors, emotions, and attitudes; personality; and abnormal behaviors. Psychology majors and minors are required to take this course as a prerequisite for all advanced courses in psychology. This course is open for non-majors and meets all general education requirements. Equivalent to TAG OSS015.	**CRJ/PSC/PSY/SWK/SOC 2206.Statistics for Social and Behavioral Sciences (I, II; 4)** This course provides students with an introduction to basic statistical techniques used by researchers in the social and behavioral sciences. Major topics include frequency distributions, measures of central tendency and variation, regression and correlation, and hypothesis testing. A computer lab is required with this course. Prerequisite: MTH 1750 or MTH 1550, grade "D" or better.
PSY 2220. Human Growth and Development (I, II; 3) Developmental processes from conception through older adulthood. Analysis of the development of the individual from conception in	**PSY 2310. Psychology of Exceptional Children (I; 3)** An analysis of the physical, mental, and social factors which condition exceptional behavior in children as deviations from the normal patterns. An	**PSY 2320. Abnormal Psychology (I; 3)** Study of the types, causes, diagnostic characteristics, and treatments of mental disorders. Consideration will be given to minor and serious types of disorders and

physical, lingual, social, intellectual, and emotional areas. Emphasis is placed on behavioral changes taking place at various stages of the life cycle as functions of heredity and development. Prerequisite: PSY 1200. Equivalent to TAG OSS048.	overview of current programs for the education of exceptional children is provided. Prerequisites: PSY 1200 and PSY 2220.	mental disturbances, as illustrated by case methods. Prerequisite: PSY 1200. Equivalent to TAG OSS017.

PSY 2330. Psychology of Personality (II; 3) A study of the fundamental factors underlying personality development and adjustment, especially among African 269 Americans. Intensive analysis of the dynamics of adjustment will also be covered. Prerequisite: PSY 1200. Equivalent to TAG OSS018.	**PSY 2655. Drugs and Human Behavior (On Demand; 3)** This course provides a multifactor perspective on the use and abuse of legal and illegal drugs, and their impact on an individual's physical, psychological, social behavior and family system. Additionally, this course will explore the historical antecedents, theories, research and treatment approaches to chemical dependency in the United	**PSY 3334. Psychological Measurement (II; 3)** An analysis of theoretical principles and assumptions basic to the measurement of human characteristics and behavior. Offers training in the selection and use of psychological tests, and practice in both group and individual testing. Prerequisites: PSY 1200 and SOC 2206 or an equivalent statistics course.
PSY 3335. Principles of Learning (I; 3) This course studies the basic principles of learning and the application of these principles to areas of human behavior. Prerequisite: PSY 1200.	**PSY 3380. Introduction to Counseling (I; 3)** This course is designed to provide junior psychology students with basic counseling techniques used particularly by transactional analysis, client-centered theory, existential counseling, rational emotion therapy and others. Emphasis will be placed on the philosophical approach and techniques basic to individual as well as group counseling techniques and conditions. Prerequisites: PSY 1200 and junior or senior standing.	**PSY 3385. The Psychology of Aging (II; 3)** This course focuses on the psychological aspect of aging, with an emphasis on the interaction of psychological, socio-cultural and biological aspects of the aging process. Special attention is given to the physical, emotional, intellectual and social aspects of late adulthood. Prerequisite: PSY 1200 and 2220
PSY 3410. Sensation and Perception (On Demand; 3) A review of the human sensory systems and an integration of sense processes with the principles of perception. Perception is viewed as an active process based on both innate and learned factors. Some attention is given to understanding illusions and the controversy of extrasensory perception. Prerequisites: PSY 1200	**PSY 3420. Social Psychology (II; 3)** A study of the psychological dynamics involved in social attitudes and group relationships as they influence the behavior of the individual. Prerequisites: PSY 1200. Equivalent to TAG OSS016.	**PSY 3450. Research Methods (I; 4)** This course provides an introduction to psychological research techniques and methodology. Basic principles and procedures in the design, analysis, and write-up of research are covered. The student will write a research proposal using the most current APA style. Prerequisites: PSY 1200 and SOC 2206.
PSY 3496. Field Experience I (I; 3) This course provides opportunity for the student to enhance classroom education with observation of psychological activity in an organization serving social, mental health, educational, biological, developmental, or industrial/organizational psychology interests. Open only to junior and senior psychology majors. Must have departmental approval and faculty and agency supervision. Prerequisites: Junior standing in the psychology major, and a 2.5 or above GPA.	**PSY 3497. Field Experience II (II; 3)** This course is a continuation of PSY 3496. The aim of the course is to offer students the opportunity to apply what they learned in the classroom to their field placements in the area of clinical psychology. Emphasis will be placed on the counseling approaches and techniques. Prerequisite: PSY 3496.	**PSY 4420. Physiological Psychology (On Demand; 3)** A study of the relationship between physiological mechanisms and behavior. Major emphasis is given to the basic structure of the relationship of the nervous system and its interaction with various biochemical mechanisms affecting behavior. Topics include sensory processes, motor processes, and the bearing of biochemical and neuropsychological processes upon motivation, emotion, learning, and behavioral disorders. Prerequisite: PSY 1200

PSY 4450. Special Problems in Psychology (I, II; 3) This course provides an opportunity for advanced students in psychology to work independently on a special 270 problem(s) selected by the faculty member teaching the class. Prerequisite: Junior or senior standing in the psychology major	**PSY 4495. Independent Study (I, II; 1-3)** This course is an in-depth independent study of an approved topic in psychology under the supervision of a psychology faculty member in the Department of Social and Behavioral Sciences. The topic selection is made by the student with written approval of the supervising faculty member. Periodic meetings, written and/or oral reports, and a final paper are required. Prerequisites: Junior or senior standing and permission of the instructor prior to registration. Psychology majors only.	**PSY 4895. Senior Capstone Seminar (II; 3)** This capstone course is designed to assess psychology majors' readiness for employment and/or graduate training. Emphasis is on the integration of learned knowledge acquired from psychology courses. Assignments include the completion of a written senior thesis and oral defense of the same, a senior project, or a psychology comprehensive examination. Prerequisites: PSY 3450, SOC 2206 and senior standing in the psychology major.

SOCIAL WORK

SWK 1100. Introduction to Social Work (I, II; 3) The course introduces students to social work as a profession; practice settings for social workers are explored, and various practice roles are examined.	**SWK 2200. Introduction to Social Welfare (I, II; 3)** Examines the history and organization of social welfare in the United States; the historical and cultural foundations of how societies have developed social welfare services; and contemporary issues that may have some impact on social welfare services.	**CRJ/PSC/PSY/SWK/SOC 2206. Statistics for Social and Behavioral Sciences (I, II; 4)** This course provides students with an introduction to basic statistical techniques used by researchers in the social and behavioral sciences. Major topics include frequency distributions, measures of central tendency and variation, regression and correlation, and hypothesis testing. A computer lab is required with this course. Prerequisite: MTH 1750 or MTH 1550, grade "D" or better
SWK 2310. Introduction to Social Work Research (On Demand; 3) This Course will introduce students to the concepts and principles of social work research methodology. In this course students will explore scientific, analytic approach to building empirically based knowledge for social work practice. Students will learn both quantitative and qualitative research designs and methods to obtain diverse types of knowledge, including evidence-based interventions; Students will also become informed of researching, evaluating, and informing, social work policy and practice.	**SWK 2340. Cultural and Social Sensitivity (On Demand; 3)** This course will give students a foundation in the awareness, knowledge, understanding, and skills needed to effectively carry out multicultural social work practice with culturally diverse populations. This course will explore the differences in communication styles and relevant experiences such as racism, classism, sexism, homophobia, heterosexism, ethnocentrism, gender and power, ableism, and ageism. Students will critically analyze social work practice and social welfare organizations in the framework of diversity, power, oppression, and inequalities. Students will demonstrate an understanding of the impact of diversity and equality on human systems, social policy, and social justice.	**SWK 3011. Human Behavior and the Social Environment I (I; 3)** Examines human development and social functioning from infancy through adolescence. Major theories on human development are presented; specialized content on cultural diversity and special populations is presented; and students are provided information on how the family, social networks, groups, and communications may influence human development and social functioning.
SWK 3012. Human Behavior and the Social Environment II (II; 3) Examines human development and social	**SWK 3320. Social Services and Issues for Older Adults (I; 3)** Critically examines the social, psychological, and physiological	**SWK 3330. Social Work in Health Care Services (I, II; 3)** Examines current policies in service delivery; considers

functioning from adolescence through adulthood. Major theories on human development are presented; specialized content on cultural diversity and special populations is presented; and students are provided information on how the family, social networks, groups and communities may influence human development and social functioning at each stage of 271 development. Prerequisite: SWK 3011.	aspects of aging; focuses on special problems of aging with a developmental disability and other disabilities that may occur with the aging process; identifies social services for the aged and the service delivery role of practitioners.	issues of interdisciplinary collaboration in health care, the impact of illness on family functioning, the availability of physical and mental health care services, and the ethical dilemmas of social workers in health care systems.
SWK 3406. Social Welfare Policy and Services (II; 3) Examines societal value orientations and influences on the formation of policies and programs, and the use of scientific knowledge and skill in policy analysis. Specific policies and programs are critically examined.	**SWK 4201. Generalist Practice I (I; 3)** This first course in the generalist practice is designed to help students develop and apply basic knowledge and skills in problem solving, communication techniques, individual and family needs assessments, planning implementation, evaluation, and termination of services intervention in practice with individuals and families. Prerequisites: SWK 3011 and 3012 and must be an accepted Social Work major.	**SWK 4202. Generalist Practice II (I; 3)** This is the second course in the generalist practice sequence. The course is designed to provide theory and skill development in group dynamics for generalists social work practice. Content focuses on group formation, communication, member roles, group functions and theories for understanding human behavior and the process of small group dynamics in the helping process. Prerequisites: SWK 1100, 2200, 3011, 3012, and must be an accepted Social Work major.
SWK 4203. Generalist Practice III (II; 3) This is the third course in the generalist practice sequence. This course introduces students to generalist practice intervention with organizations and communities. Students are exposed to various concepts and dynamics of intervention with these systems. Special attention is given to providing content that reflects treatment of ethnic minorities, women, and other disadvantage groups. Prerequisites: SWK 4201, 4202, and must be an accepted Social Work major.	**SWK 4420. Child and Family Services I (II; 3)** Examines historical and current basis for policies, programs, and practices in child and family services. Considers the relationship among federal, state, and local laws which influence policy, and the impact on clients, social workers and responding social service systems.	**SWK 4421. Child & Family Services II (On-demand; 3)** This is the second course in the Child Welfare series, serving as a foundation in preparing students for a career in child protective services as social work professionals. This course is designed for students to develop the requisite values, skills, and knowledge to be high-quality child welfare professionals.
SWK 4595. Comprehensive Social Work Seminar (On Demand; 2) This capstone course is taken in conjunction with SWK 4596. The course is designed to provide an opportunity for field students to convene and discuss their field experiences and includes the critical integration and demonstration of knowledge and skill acquired during their social work education. Prerequisites: SWK 4496, and major in Social Work and/or with permission of instructor. Must be taken concurrently with SWK	**SWK 4596. Field Practicum (On Demand; 12)** This course is taken with SWK 4595. Students will have a weekly supervised field experience in an agency or social service organization approved by the Social Work Program. The field education experience provides opportunity for the student to learn and to apply acquired knowledge. Students are in the field four days a week and must participate in a concurrent weekly seminar. Prerequisites: SWK 4201, 4202, 4203 and major in Social Work and/or with	

4596 and can be taken concurrently with SWK 4012.	permission of the instructor.	

SOCIOLOGY

SOC 1105. Introductory Sociology (I, II; 3) A study of fundamental principles of sociology. Basic concepts of social structure, processes, and interactions and an overview of the major theoretical perspectives and research methodologies used in analyzing social institutions. Equivalent to TAG OSS021.	**SOC 1111. Cultural Anthropology (II; 3)** This course focuses on theories and methods of cultural anthropology with examples from a worldwide sample of societies, including our own. It will include a survey of various institutions such as politics, religion, kinship, language, and 272 art in various cultural contexts. Prerequisite: SOC 1105. Equivalent to TAG OSS001.	**SOC 1125. Social Problems (I, II; 3)** A critical analysis of selected contemporary social problems such as crime, population and environmental issues, mental and physical illness, minority relations, substance abuse, teenage pregnancy, family violence, and old age and retirement. A global approach will be used in exploring the scope and causes of, and solutions to, these problems. Equivalent to TAG OSS025.
CRJ/PSC/PSY/SWK/SOC 2206. Statistics for Social and Behavioral Sciences (I, II; 4) This course provides students with an introduction to basic statistical techniques used by researchers in the social and behavioral sciences. Major topics include frequency distributions, measures of central tendency and variation, regression and correlation, and hypothesis testing. A computer lab is required with this course. Prerequisite: MTH 1750 or MTH 1550, grade "D" or better.	**SOC 2230. Introduction to Gerontology (I; 3)** A comprehensive introduction to human aging with emphasis on its social and social psychological aspects. A review of current literature and research findings on aging. Prerequisite: SOC 1105 or SOC 1125.	**SOC 2800. Methods of Social Research (II; 4)** This course covers the major techniques social scientists use to answer empirical research questions. Major topics include conceptualization and measurement, sampling, research designs (i.e. surveys, experiments, single subject and qualitative), evaluation, and ethical issues in research. Students will design and conduct research using SPSS to organize and analyze data. A computer lab is required. Prerequisite: SOC 2206 with a grade of "C" or better, and junior or senior standing
SOC 3325. Race and Ethnic Relations (II; 3) A systematic and critical analysis of racial and ethnic relations in contemporary societies. Major emphasis on the impact of cultural, historical, political, and economic forces on interaction among racial and ethnic groups in the United States. Prerequisite: SOC 1105 or SOC 1125. Equivalent to TAG OSS024.	**SOC 3330: Gender and Society (On Demand; 3)** This course focuses on the study of gender as a social construct and institution. Gender is a principal organizational institution in society, influencing our day-today lives and the structures of society. Theories and analysis of gender roles in contemporary society in a cross-cultural and historical context will be compared. Examines the political, economic, domestic, and cultural inequalities related to gender at the local and global scale.	**SOC 3333. Criminology (I; 3)** A study of the causative factors of criminal behavior, organized and professional crime, and crime repression. Prerequisite: Six semester hours of sociology or permission of the instructor. Equivalent to TAG OSS034.
SOC 3343. Social Stratification (I; 3) This course provides a systematic study of stratification systems in contemporary societies, with particular emphasis on the class system in the United States. It explores the various theories and perspectives on stratification systems, the distribution of wealth and income, and the patterns and processes of social mobility in the United States. Prerequisites: SOC 1105 or SOC 1125, and junior standing or above.	**SOC 3345. Sociology of Marriage and the Family (II; 3)** A systematic analysis of the changing family in the United States and other societies. Topics will include courtship and marriage, marital gender roles, child rearing, marital dissolution, family diversity, and other issues associated with family relations in modern and postmodern societies. In addition, emphasis will be placed on the family's relationship to economic structures, political institutions, and belief systems. Prerequisites: SOC 1105 or SOC 1125. Equivalent to TAG OSS023.	**SOC 3370. The Family and the Aging Process (II; 3)** An exploration of the structural functional and institutional framework of aging families. Topics will include the interaction of older parents and their children, family disorganization, health, widowhood, sexuality, and kinship ties in later life. Prerequisites: SOC 2230

SOC 3380. Minority Aging (I; 3) (Odd Years) A study of the demographic, psychological, and socio-cultural aspects of aging in African American, Hispanic, and Native American populations in the United States. Focus on health and health care issues, retirement, income, formal and informal support, and other problems faced by 273 of these groups. Prerequisite: SOC 2230	**SOC 3415. Juvenile Delinquency (I; 3)** This course will be overview of juvenile delinquency from a primarily sociological perspective. The course will address the nature and extent of delinquency, including definitions, history, distribution and measurement of juvenile delinquency. In addition, various theories of juvenile delinquency, issues of gender, and programs associated with the prevention and control of delinquency will be discussed. Prerequisite: SOC 1105 or SOC 1125.	**SOC 3510. Sociology of Deviance (II; 3)** This course will examine deviance and social control from a sociological perspective. Attention will be given to provide students with a clear and concise description and analysis of deviance as well as to interpret past and current social events/behavior using theories of deviance. The course will further investigate the interrelations between culture, race, power, identity information and social change as they influence who is defined as deviant and what actions/behaviors are labeled as deviant. Prerequisites: SOC 1105 or SOC 1125.
SOC 3800. Sociological Theory (I; 3) This course provides a critical exposition of the development of sociological thought from the eighteenth century to the present time. It covers all of the major schools of theory, including Marxism, functionalism, conflict theory, symbolic interactionism, critical theory, post-structuralism, and post-modern social theories. Prerequisite: Junior standing or above	**SOC 4551. Sociology of Health and Illness (I; 3)** A critical analysis of the social organization of health care delivery systems and the social causes and distribution of health and illness in the United States. Alternative construction of health and illness and models of health care delivery systems will be explored. Prerequisite: Junior standing.	**SOC 4596. Internship in Sociology and Gerontology (I, II; 2-4)** Application of sociological and gerontological knowledge in various private and public social human services agencies, including aging agencies, government offices, and juvenile and criminal justice agencies. Internships are not permitted during the summer. Prerequisites: Junior standing or above and permission of advisor.
SOC 4895. Senior Capstone Seminar (II; 3) This is the required capstone for the sociology major. The course will review the major areas covered in the sociology curriculum. It will emphasize major topics in sociology including sociological theory, research, statistics, social stratification, race and ethnic relations, and family. Students will develop and complete a project that demonstrates their grasp of essential sociological principles and practices. Prerequisite: SOC 2800, 3800, and senior standing.	**SOC 4897. Independent Study (I, II; 1-2)** An in-depth study of an approved topic in sociology, criminal justice, or gerontology under the supervision of a faculty member in the Department of Social and Behavioral Sciences. The topic selection is made by the student with written approval of the supervising faculty member. Periodic written and/or oral reports and a final paper are required. Also open to criminal justice and gerontology minors. Prerequisite: Senior standing.	

UNIVERSITY SUCCESS

USS 1000. Undergraduate Success Seminar (I, II; 1) This is a two-credit hour, hybrid format course that provides opportunities for students to learn and apply practical knowledge and skills required for success at the college-level. Topics include CSU resources, policies, and processes; utilization of technology; health and wellness; financial and information literacy, and the history of HBCU's, and CSU in particular, within their cultural and historical context. The course consists of a once per week 50-minute live seminar, completion of online coursework, and participation in qualifying campus events. This course is a General Education requirement	**USS 1200. Undergraduate Success Skills (II, on demand; 1)** USS 1200 is designed to help students with goal setting, financial literacy, time management, study skills, and reflection. This course is structured for students to develop and implement a successful academic plan to sustain matriculation	

WATER RESOURCES MANAGEMENT

WRM 2200. Introduction to Water Resources Management (I, II, III; 3) Introductory course 274 in water resources management designed to give students an interdisciplinary view of the nature of water as a resource. Topics include Hydrologic Cycle, soil ecology, hydrogeology, irrigation and crop water requirements, water pollution and economics of water policy.	**AGR/WRM 2450. Soil Science (I, II, III; 4)** This course introduces students to soils; their formation, classification, and survey. It covers physical, chemical, and biological characteristics; soil management and its role in crop production. Three hours of lecture and two hours of lab. Prerequisite: CHM 1201.	**WRM 3302. Water Resources Policy (II; 3)** An examination of major issues in water management and the development of policies at various levels of government that attempt to deal with those issues. Emphasis on the political aspects of policy development. Consideration of land use policy as it relates to water management issues. Prerequisite: WRM 2200.
WRM 3306. Socio-Economic Issues in Water Management (I; 3) A review of social, economic and other factors which influence the development of water management programs and the implementation of water management technologies. Problem solving in the selection and application of appropriate technologies given certain social and economic constraints. Prerequisite: WRM 2200 or permission of the instructor.	**WRM/AGR 3308. Environmental Law (II; 3)** A case by case study of state and federal legislation relative to water use. Federal laws relating to water and environment; Land use legislation as it impacts the management of water resources and environment is also considered. Prerequisites: WRM 2200 or AGR 1150 or Corequisite: ENE 2200.	**WRM 3310. Streams and Lakes (II; 3)** Introduction to the physical, chemical and biological ecology of streams and lakes. Emphasis on the structure and functions of natural ecosystems and man's impact on his natural environment. Field laboratory experience includes the use of nets, seines, traps and chemical and electronic monitoring equipment and the analysis of ecological data. Three one-hour lectures/one two-hour lab. Prerequisites: BI0 1500 and WRM 2200.

WRM 3311. Water Resources Economics (I; 3) Principles of economics as applied to water supply and the regulation of water quality including cost benefit analysis, pricing, discounting spillover effects, economic incentives, etc. Prerequisites: AGR 1150 and WRM 2200.	**WRM 3312. World Water Resources (II; 3)** A survey of world water resources by geographical area. An examination of the relationship of the availability of water resources to the political and economic stability of regions and nations. Prerequisite: WRM 2200.	**WRM/AGR 3330. Soil and Water Conservation (II; 4)** Hydrological processes in agricultural fields - rainfall, infiltration, evaporation, evapotranspiration and runoff; Ground Water Processes; Water conservation practices; Soil erosion due to rainfall, its effect on agricultural productivity and water quality-estimating soil loss from agricultural lands using Agriculture
		Research Service (ARS-USDA) models - Universal Soil Loss Equation (USLE) and its revisions; Practices to mitigate soil erosion; Design of grassed waterways, terraces and conservation structures; Wind erosion -estimation using ARSUSDA models and its mitigation; An examination of the federal, state and local organizations which carry out soil and water conservation programs. Field experience includes on-site observation of soil and water conservation practices. Three-hour lecture and one hour lab/field work. Prerequisites: MTH 1750 and WRM 2200 or AGR 1150.
WRM/AGR 3335. Irrigation and Drainage (I; 3) A first course in the study of irrigation and drainage and practices. Soil structure, soil moisture processes and infiltration; evapotranspiration processes and their applications in irrigation and drainage; Models for evapotranspiration and introduction to irrigation scheduling; Irrigation and drainage practices in different parts of the world; Introduction to on farm and main systems in large scale irrigation projects. Water control and distribution in large scale systems. Sprinkler irrigation for non-agricultural purposes and the on-site observation of irrigation and drainage systems in the area. Prerequisites: MTH 1750 and WRM 2200 or AGR 1150.	**WRM 3340. Hydrometry (II; 2)** Techniques for the 275 measurement of water in the atmosphere, and surface and sub-surface media; Soil moisture estimation, humidity measurement; rainfall measurement using recording gages and remote sensing techniques; Discharge measurement in constructed systems - weirs and flumes; Stream flow measurement using current meters, electro-magnetic and acoustic instrumentation; Aquifer parameters estimation using drawdown tests; Accuracy of and errors in measurement; Assurance and control of quality of water data. One hour lecture/one two-hour lab. Prerequisites: WRM 3330.	**WRM /GEO 3370. Introduction to Geographic Information System (I; 3)** Topics of instruction will include analyses of selected, spatially distributed information of natural resources and other societal parameters. Nature, characteristics, specification, types, acquisition, processing, organization, and management of spatial or geographic data. Application of the basic functional and analytical capabilities of GI systems using raster methods and vector methods. The course will include practical instruction on commonly used geographic information software (GIS). Prerequisite: MTH 2501 or higher. Equivalent to OSS026.

WRM 4402. Urban Water Problems (II; 4) An examination of water problems faced by urban America and solutions to those problems. Urban Hydrology, Wastewater treatment, the supply of quality drinking water, storm water management, flood protection, water for recreation, urban fishing, economic development and infrastructure requirements as pertaining to urban areas and the integrated management. Water infrastructure rehabilitation assessment; Causative water and environmental factors on health. Prerequisites: MTH 1750 and WRM 2200	**WRM 4403. Water Transportation Systems (II; 3)** A survey of water transportation principles and projects including deep and shallow draft ports, small boat harbors, locks and dams, and river control structures. The economic, physical and political aspects of transportation systems are emphasized. Prerequisites: WRM 3306.	**WRM 4404. Water Resources for Recreation (II; 3)** A study of the use of water for recreational purposes. Concepts of leisure play, and recreation are defined and related to recreation behaviors which are dependent upon water. Social, political, economic and environmental policies affecting the recreational use of water are reviewed and discussed. Prerequisite: WRM 3306.
WRM/AGR 4406. Agricultural Development (I; 3) The role of agriculture in the economic development in the world. The course examines theories of agricultural growth and agriculture policy issues, with extensive use of case studies. Emphasis will be placed on the use of economic theory and its application to specific problems in the field of agriculture. Prerequisite: WRM 2200 or AGR 1150 or permission of the instructor.	**WRM/AGR 4420. Irrigation Systems Design (II; 4)** An applied course in the design of on-farm irrigation systems. Advanced evapotranspiration modeling and irrigation scheduling; Design and operational principles of surface, sprinkler and drip irrigation systems; Water losses in irrigation systems and the definitions of various efficiencies associated with on farm and main irrigation systems. Hydraulic structures associated with distribution of water systems. On-farm application equipment selection and maintenance. Irrigation system performance and irrigation water management impacts on design; Introduction to irrigation water quality. Field visits to sprinkler irrigation systems in the area. Prerequisites: WRM/AGR 3335 or permission of the instructor.	**WRM/AGR 4425. Agricultural Drainage Systems Design (II; 4)** An applied course in the design, construction and maintenance of drainage systems for agricultural fields. Surface drainage systems layout and design. Design of hydraulic structures associated with surface drainage systems - chutes, drops, outlet structures and culverts. Surface drainage systems in irrigated areas. Subsurface system design principles. Steady state and unsteady state theories of tile drainage. Introduction to analysis of oxygen transport in root zone and the effect of submergence. Salt balance and water quality issues in subsurface drainage. System layout, construction materials and methods. Design of structures associated with subsurface drainage systems. Cost recovery of drainage systems and maintenance issues. Field visits to drainage systems in the area. Prerequisite: WRM/AGR 3335or permission of the instructor.

WRM 4596. Internship (I, II, III; 3) On the job training in agencies and/or companies engaged in activities related to environmental engineering/ water resources management. Not open to students who have participated in the co-op program.	**WRM/GEO/GEL 4470. Applied Remote Sensing (II; 3)** Students will learn about different instrument systems attached to aircraft and satellites that collect environmental data. Practical instructions on how the remotely acquired data sets are processed and interpreted using appropriate software will be given. Interpretation of multispectral scanners, RADAR and thermal imagery data; Data analysis for detection of changes; image interpretation; study of spectral characteristics of vegetation, soils, water, minerals, and other materials. Case studies will be presented for the different types of application. Prerequisite: MTH 2501.	

DEPARTMENT DIRECTORY

Department	Phone Number	Email Address	Location
VP of Student Egagement & Persistance/ Dean of Student Development	937-376-6387	Rgriffin@Centralstate.edu	University Student Center, Room 214
Office of Admissions (Traditional)	937-376-6348 or 937-376-6121	admissions@centralstate.edu	Norman E. Ward Sr. Center
Marauder Leadership and Engagement	937-376-6414		University Student Center, Room 109
Marauder Conduct & Community Standards	937-376-6421		
Office of Career Services	937-376-6383		University Student Center, Room 217
Counseling Services	937-376-6171 or 937-376-6338		Harry M. Lackey/Benjamin F. Lee Health Center
Office of Academic Empowerment and Accessibility	937-376-6479		Harry M. Lackey/Benjamin F. Lee Health Center
Interfaith Campus Ministry	937-376-6566		
Residence Life	937-376-6386		Foundation Hall II
Greek Life	937-376-6414		University Student Center, Room 109
Office of Violence Against Women	937-376-6414		University Student Center, Room 109A
Student Government Association	937-376-6414		University Student Center, Room 109
Office of Title IX	937-376-6563		Newsom Administration Building, Room 10B
Mister and Miss CSU and Royal Court	937-376-6414		University Student Center, Room 109
Office of Financial Aid	937-376-6111		Norman E. Ward Sr. Center
Office of Cash Management	937-376-6343	cashmanagement@centralstate.edu	Norman E. Ward Sr. Center
Office of the Registrar	937-376-6232	registrar@centralstate.edu	Norman E. Ward Sr. Center

Office of the Provost	937-376-6431		Lionel H. Newsom Administration Building, Room 205A

Office of Institutional Research	937-376-6236		Charles H. Wesley Arts & Science Building, Room 128
Center for Teaching and Learning	937-376-6656		Charles H. Wesley Arts & Science Building, Room 213
Campus Police	937-376-6568		Joseph D. Lewis / George T. Simpson Hall Campus Police Main Entrance
Undergraduate Research and Student Engagement Office	937-376-6265		Carl C. Jenkins Technology Education Hall, Room 123
Intercollegiate Athletics	937-376-6289		Madison W. Beacom/Gaston F. Lewis Gymnasium
Teacher Education Advisement and Partnership Center (TEAP-C)	937-376-6227		Joshua I. Smith Center for Education & Natural Sciences, Room 217, 220E, and 220F
Hallie Q. Brown Memorial Library	937-376-6106		Hallie Q. Brown Memorial Library
Honors College	937-376-6528	honors@centralstate.edu	Honors Residence Hall, Suite 128
The Title III Program	937-376-6665		
Office of Sponsored Programs and Research	937-376-6547	proposals@centralstate.edu	
Upward Bound Program	937-376-6496		
Central State Global			Center for Instructional Technology Innovation (C.I.T.I.) Norman E. Ward Sr. Center, Room 200
Central State University-Dayton	937-376-6167		840 Germantown Street Dayton, Ohio 45402
Office of Academic Coaching and Advising	937-376-6110		Norman E. Ward Sr. Center
Office of Academic Support and Instructional Services	937-376-6247		Norman E. Ward Sr. Center
Office of Retention & First-Year Experience	937-376-6110		Norman E. Ward Sr. Center

College of Business	937-376-6642		Charles S. Smith Hall

CHASE	937-376-6453		for Education and
John W. Garland College of Engineering, Science, Technology, and Agriculture	937-376-6153		Joshua I. Smith Center for Education and Natural Science
Department of Military Science	937-376-6286 or 937-376-6382		Carl C. Jenkins Technology Education Hall

PRESIDENTS

Morakinyo A.O. Kuti '85	2024 - Current
Alex Johnson (Interim)	2023-2024
Jack Thomas	2020-2023
Cynthia Jackson Hammond	2012-2020
John W. Garland '74	1997-2012
Arthur E. Thomas '62	1985-1995
Lionel H. Newsom	1972-1985
Lewis A. Jackson	1970-1972
Herman R. Branson	1968-1970
Harry E. Groves	1965-1968
Charles H. Wesley	1947-1965

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EMDAD AHMED *Assistant Professor of Computer Science* B.S., M.S., Bangladesh University of Engineering and Technology MBA, Dhaka University Ph.D., Wayne State University (*2022)	**ABAYOMI AJAYI-MAJEBI** *Professor of Manufacturing Engineering* B.S., The University of Lagos (Nigeria) M.A., M.S., Ph.D., The Ohio State University (*1985)	**SALEH M. ALMESTIRI** *Associate Professor of Manufacturing Engineering* B.S., Misurata University (Misurata) M.S Ph.D., University of Dayton (*2018)
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DWOBENG OWUSU-NYAMEKYE *Associate Professor of Entrepreneurship* B.S., The Ohio State University M.E., Western Governors University M.S., Ohio Dominican University D.B.A., Keiser University (*2023)	**BHUPENDRA PAUDYAL** *Associate Professor of Mathematics* B.S., M.S., Tribhuvan University Ph.D., The University of Toledo (*2016)	**EDISON PERDOMO** *Chair, Health and Social Science Department and Professor of Psychology* B.A., Rutgers University M.A., Ph.D., University of Iowa (*2004_

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SANDRA RILEY *Teaching Instructor of English* B.A., The Ohio State University M.Ed., Antioch University M.A., University of Dayton (*2022)	**GENEVIEVE RITCHIE-EWING** *Associate Professor of Sociology* B.S., Millersville University M.S., University of Tennessee-Knoxville Ph.D., The Ohio State University (*2019)	**A. CAROLYN SANDERS** *Assistant Professor, Hallie Q, Brown Library* *Media Services / Curriculum Librarian* B.S., M.A., Miami University M.L.S., Indiana University (*1994)

CRAIG SCHULUTTENHOFER *Research Associate Professor of Natural Products* B.S., M.S., Purdue University Ph.D., University of Kentucky (*2019)	**KRIS SCHROATH** *Associate Professor Business/Entrepreneurship* B.A., John Carroll University M.B.A., Ph.D., Kent University (*2020)	**SUZANNE SELEEM** *Professor of Chemistry* B.Sc., M.Sc., American University in Cairo, Egypt Ph.D., University of West London, U.K. (*2004)
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JOSHUA SINGER Associate Professor of Language Arts B.A., Ohio University M.Ed., Ph.D., University of Toledo (*2019)	**ERIN SMITH-GLENN** Associate Professor of Art B.A., Central State University M.F.A., University of Cincinnati (*2010)	**SUSAN SPEIGHT** *Assistant Professor of Agriculture* B.S., University of Maryland M.S., University of Kentucky Ph.D., Virginia Polytechnic Institute and State University (*2020)

SAKTHI KUMARAN SUBBURAYALU Research Associate Professor of Soil/Soil Science B.S., M.S., Tamilnadu Agriculture University (India) Ph.D., The Ohio State University (*2017)	**SANDRA SUMMERFIELD** *Associate Professor of Reading* *B.S., Prescott College* *M.Ed., Xavier University* *Ph.D. Nova Southern University (*2018)*	***MENGXIA SUN*** *Assistant Professor of Mathematics* *B.B.A., Anhui Agricultural University* *M.S., University of Cincinnati* *Ph.D., The Graduate Center, CUNY (*2022)*
RAJEEV SWAMI Professor of Science Education B.S., M.Ed., Ed.D., University of Cincinnati (*2006)	**KATRINA SWINEHART** Chair, Professional Education and Music and Associate Professor of Agricultural Education B.S., M.S. The Ohio State University (*2018)	**BRANDI THOMAS** *Assistant Professor of Criminal Justice* B.A., Lindsey Wilson College M.S., Eastern Kentucky University M.A., Ph.D., Walden University (*2023)

JACK THOMAS Professor of English B.A., Alabama A&M University, M.Ed., Virginia State University, Ph.D., Indiana University of Pennsylvania (*2023)	**ALBERTA B. THRASH** *Associate Professor of Business Administration* B.S., M.B.A., The University of Dayton Ph.D., Capella University (*1995)	**DAVID TOKAR** *Associate Professor of Psychology* B.A., University of Akron M.A., Ph.D., Southern Illinois University at Carbondale (*2021)
JONATHAN TRAUTH *Associate Professor of Social Work* B.S., M.A., Xavier University M.S.W., University of Kentucky Ed.D., University of Cincinnati (*2019)	**ROSIE A. TURNER** *Assistant Professor of Health Physical Education and Recreation* B.S., Central State University M.A., Miami University (OH) (*1983)	**JENNIFER TURPIN STANFIELD** *Assistant Professor of Exercise Science* B.A., M.A., The Ohio State University (*2018)
Earnest Washington, III B.A., Mississippi Valley State University, M.S., Grambling State University, (*2024)	**XIAOFANG WEI** *Professor of Geography* B.E., Wuhan Technical University (Wuhan) M.S., The Third Institute of Oceanography (Xiamen) Ph.D. Indiana State University (*2007)	**RICHARD WETZEL** *Assistant Professor for Health and Physical Education* B.S., University of Tennessee M.S., Ph.D., University of Dayton (*2020)
GRETA B. WINBUSH *Professor, Psychology and Gerontology* B.S. Central State University M.S., Howard University M.P.A., Pennsylvania State University Ph.D., Pennsylvania State University (*2002)	**JEREMY WINSTON** Associate Professor of Music B.A., Oakwood College M.A., Morgan State University (*2023)	**DeBONNE N. WISHART** *Professor of Geology* B.A. (Hons), Rutgers University M.Sc., Virginia Polytechnic Institute and State University Ph.D., Rutgers University (*2010)

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EMERITI FACULTY

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DAVID RUBIN, Ph.D. Professor Emeritus of Biology Retired 1995	ALBERT SCHLUETER, Ph.D. Professor Emeritus of Chemistry Retired 1997	JAMES SEAMAN, Ph.D. Professor Emeritus of Business Administration Retired 1998
L.S. SMITH, Ph.D. Professor Emeritus of Chemistry Retired 1990	ANNE D. STEINER, Ph.D. Professor Emeritus of English Retired 2006	HOWARD F. SWONIGAN, Ph.D. Professor Emeritus of Education Retired 1997
ALEKSANDAR SVAGER, Ph.D. Professor Emeritus of Physics Retired 1997	ARTHUR E. THOMAS, Ed.D. President Emeritus Retired 1995	WILLIE J. WASHINGTON, Ph.D. Professor Emeritus of Biology Retired 1998
RUBIN WESTON, Ph.D. Professor Emeritus of History Retired 1991	URCELLE WILLIS, M.S. Professor Emeritus of Business Administration Retired 1990	EDWARD L. WINGARD, Ph.D. Professor Emeritus of Education Retired 1992
RODNEY WYSE, Ph.D. Professor Emeritus of Business Administration Retired 1994	JOHN ZAMONSKI, Ph.D. Emeritus Professor of English Retired 2016	

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